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TOP-DOWN HISTORICAL PHONOLOGY OF ROTE-METO[1]

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Abstract
This paper examines the historical phonology of the Rote-Meto languages through a top-down perspective. It describes the sound changes which have taken place between Proto-Malayo-Polynesian and the present-day languages. This reveals a number of shared innovations between Meto and the languages of west Rote, as well as changes shared by the other languages of Rote. Thus, a West Rote-Meto subgroup is identified, as well as a Nuclear Rote subgroup. Within Austronesian, there are phonological innovations shared between Rote-Meto and a number of languages of Timor and surrounding islands. This provides evidence for a Timor-Wetar-Babar subgroup, though this group does not include all languages of Timor.
Keywords: historical phonology, subgrouping, Timor, Austronesian
ISO 639-3 codes: bpz, row, dnk, llg, rgu, twu, txq, aaz, aoz, bkx

1 Introduction
In this paper, I provide a detailed account of the phonological history of the Rote-Meto languages taking a top-down perspective. I compare pre-existing Proto-Malayo-Polynesian (PMP) reconstructions with their reflexes in the Rote-Meto languages and identify the sound changes that have occurred.

This reveals six sound changes which are shared by Dela-Oenale and Dengka in western Rote and Meto on the Timor mainland.

1) merger of *d with a number of instances of *j to Proto-West Rote-Meto **r
2) initial *k > *h* in a number of forms
3) loss of *k word medially after *a
4) initial *b > *f* in a dozen forms where other Rote languages retain *b = *b*
5) *ə > *a* in final syllables
6) partially unconditioned split of *a > *a~e* in final open syllables

These sound changes provide evidence for a West Rote-Meto subgroup. Of these changes, that of final *a > *a~e* in final open syllables is, to the best of my knowledge, unattested in any other languages of the region. While the remaining five changes are not particularly uncommon, their combined weight provides a good case for identifying a West Rote-Meto subgroup.

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[1] An earlier version of this paper was presented at the Workshop for Contact and substrate in the languages of Wallacea, Leiden, Netherlands, December 1–2 2016, organized by Antoinette Schapper and funded by the Royal Netherlands Institute of Southeast Asian and Caribbean Studies, as well as the Royal Netherlands Academy of Arts and Sciences. The preparation of this paper for publication was supported the VICI research project 'Reconstructing the past through languages of the present: the Lesser Sunda Islands', funded by the Netherlands Organisation for Scientific Research, project number 277-70-012.
I would like the thank Charles Grimes, Marian Klamer and two anonymous reviewers for valuable comments on an earlier version of this paper. I would also like to thank Thersia Tamelan for providing me with her Dela data. All data in this paper which comes from my own fieldwork was collected under the auspices of the Language and Culture Unit (UBB) in Kupang, whose support is gratefully acknowledged. The analysis, interpretation, and presentation of all data in this paper, as well as any errors, remain my own.

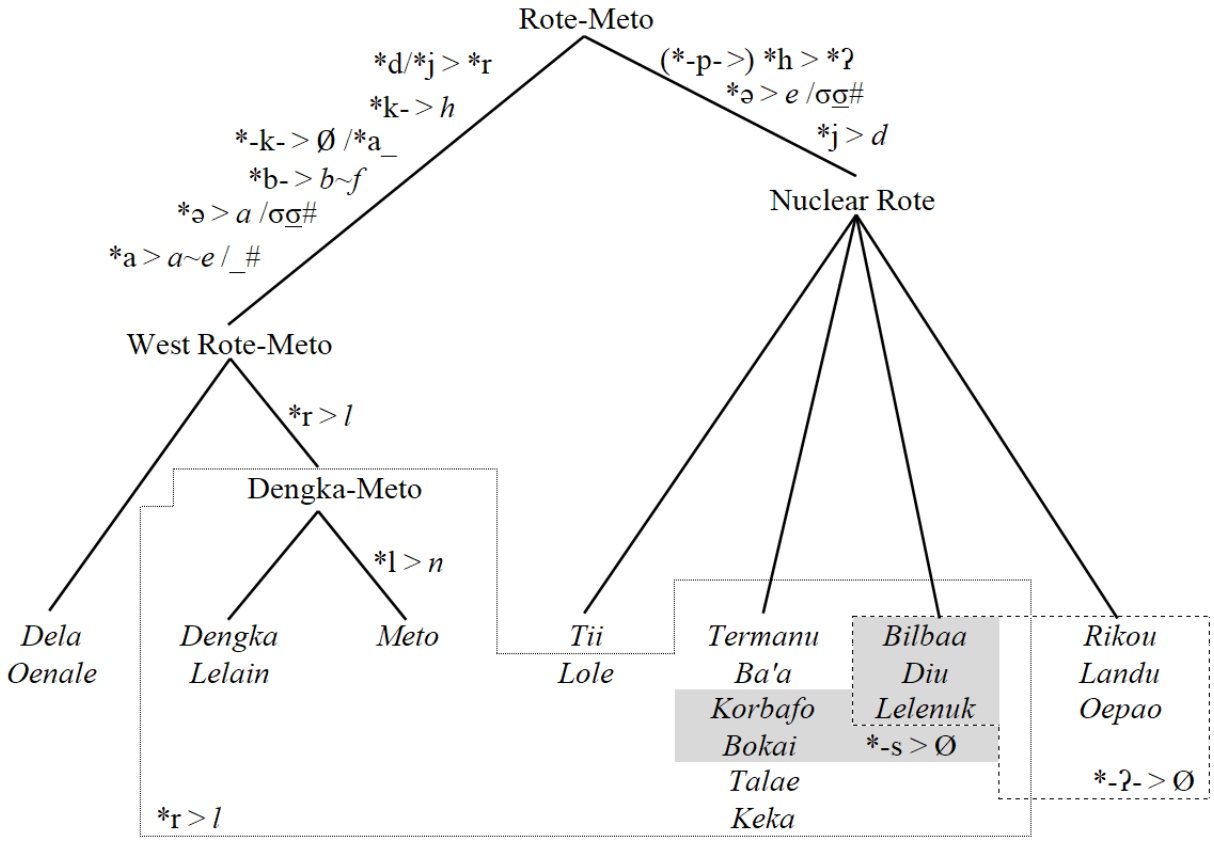
Within this subgroup, there is further evidence that Meto is most closely related to Dengka as both share the change of Proto-West Rote-Meto **r > *l. While this is a common change, it aligns with a small number of other shared Dengka-Meto features (see footnote 10 for more details).

In addition to the West-Rote-Meto subgroup, a top-down approach to the data provides some limited evidence that the other languages of Rote form a subgroup which I label "Nuclear Rote". There are three sound changes shared by these languages, given below.

1) *j > *d*
2) *ə > *e* in final syllables
3) PMP *p > **-h- > Proto-Nuclear Rote *ʔ

The family tree yielded by a top-down examination of the phonological history of these languages is given in Figure 1. Sound changes which may have spread by diffusion are given at the bottom of the tree.

Figure 1: *Rote-Meto Family Tree*



Looking beyond the Rote-Meto group, there is one sound change found in these languages which provides phonological support for identifying Rote-Meto as a distinct subgroup within Malayo-Polynesian. This is the split of PMP *w > *fa~o* word initially.

More broadly within Malayo-Polynesian, there is phonological support for a Timor-Wetar-Babar subgroup including the languages of Wetar, Babar, and most of Timor, though excluding Helong in western Timor, as well as Tokodede, Kemak, Welaun, and Mambae in central Timor.

1.1 Speech varieties

The Rote languages are spoken on the island of the same name immediately to the south-west of the island of Timor. The Meto cluster is spoken on the western part of Timor including the enclave of Oecusse, which is politically part of modern Timor-Leste. The locations of the Rote and Meto clusters along with other languages of Timor are shown in Figure 2.

Figure 2: *Language Groups of Timor*

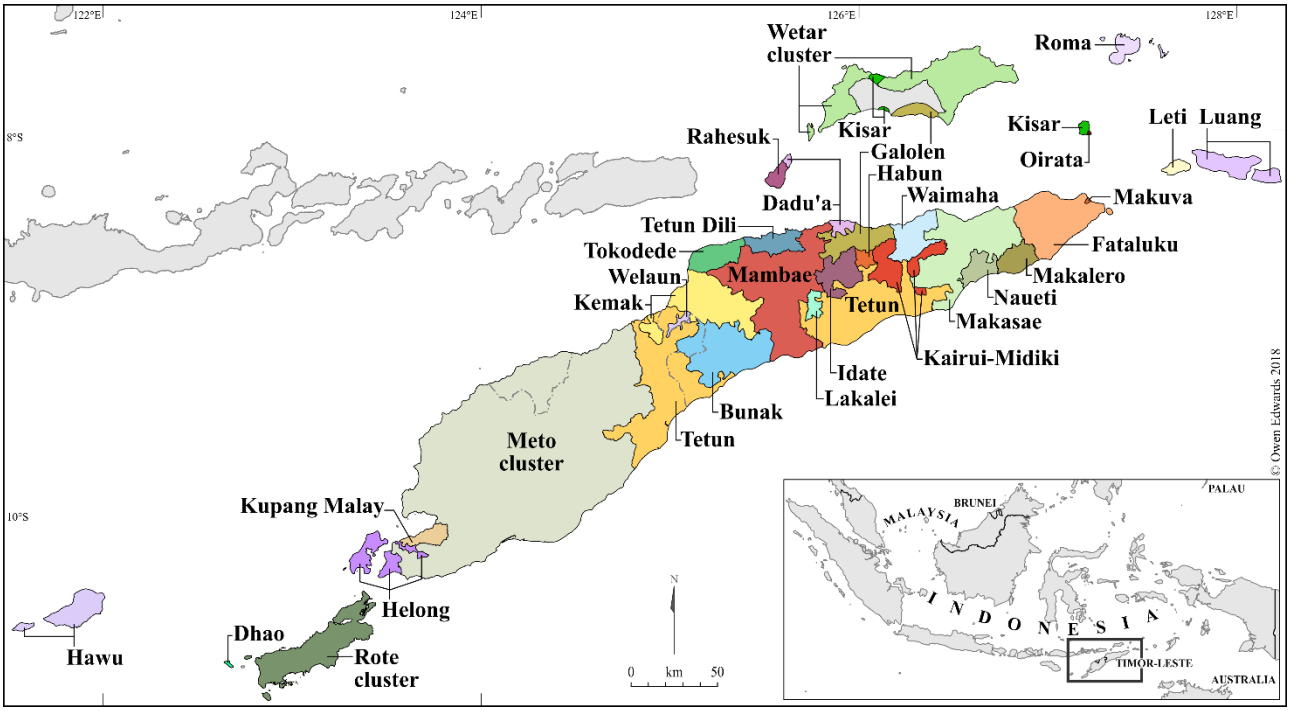
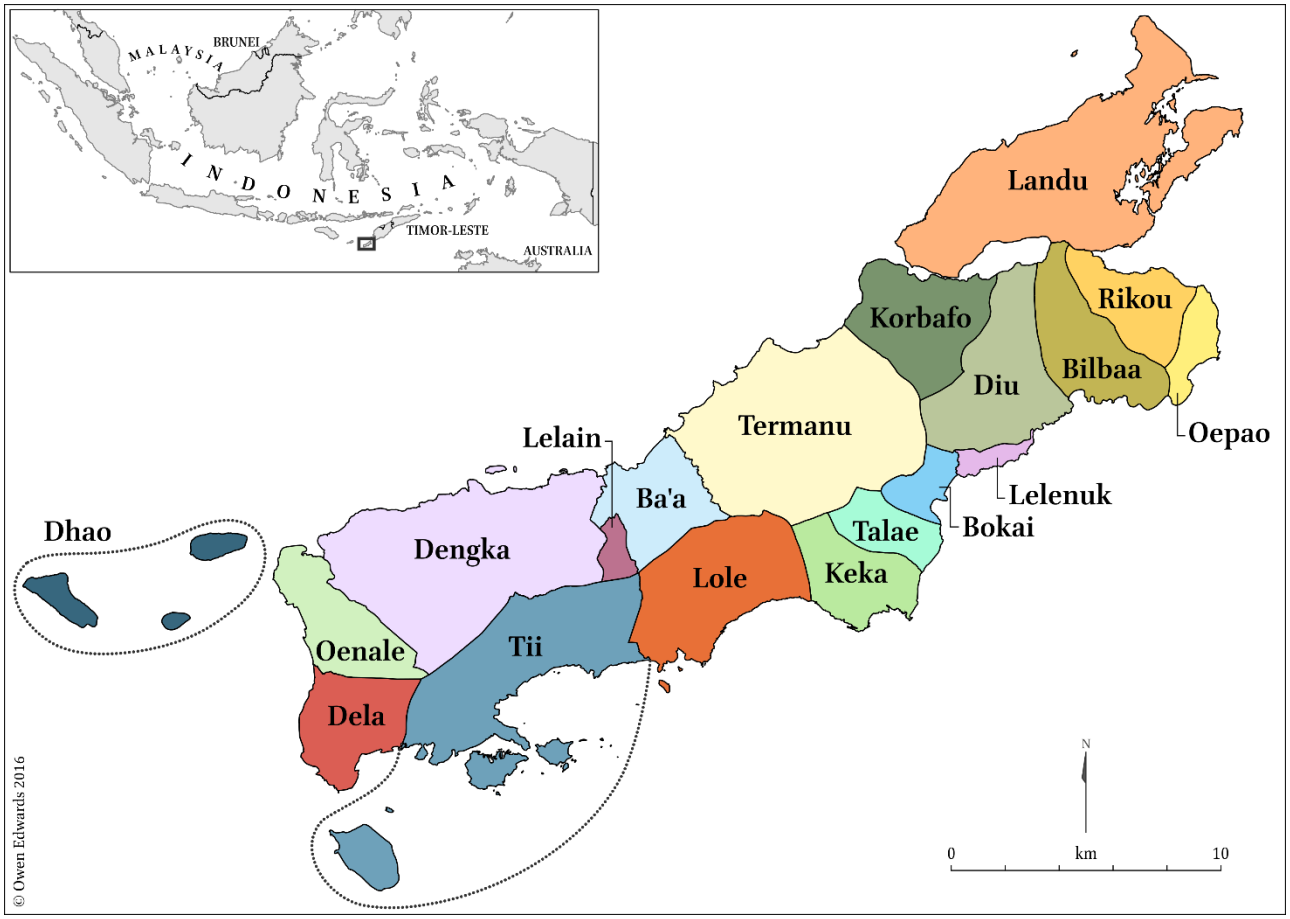


Figure 3: *Political Domains of Rote Island*



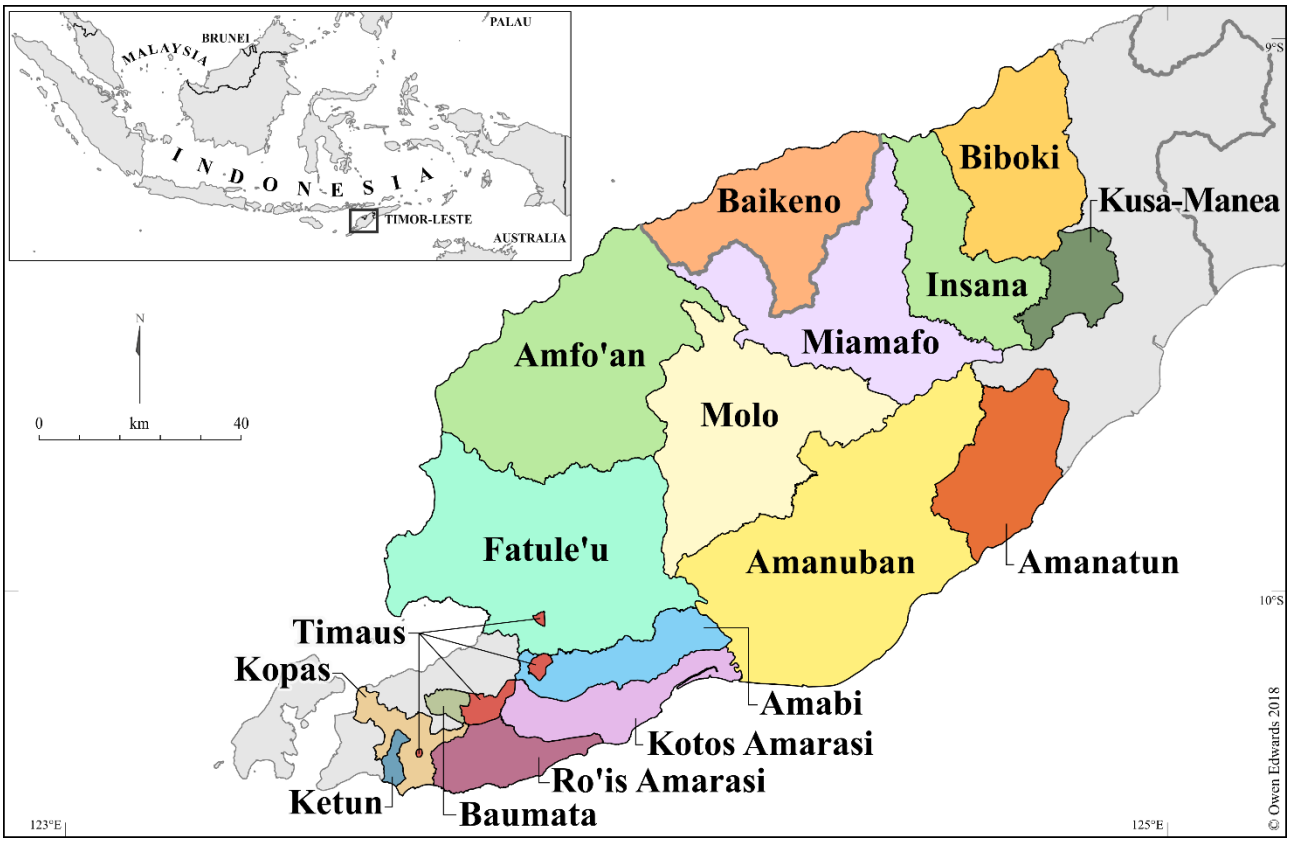
While some authors have treated the speech of Rote as a single language, in reality it is a complex language/dialect continuum akin to more familiar examples such as the Romance language/dialect continuum. Mutual intelligibility between different varieties is often lacking.

The island of Rote is divided into nineteen political units known in most of the anthropological literature as domains (*nusak* or *nusaʔ* in the languages of Rote), and many speakers claim that each domain has its own language (Fox 2016:233). A map of the domains of Rote is given in Figure 3. (The language of Dhao is not part of the Rote cluster.) Rote data in this paper is named after the political domain from which it comes.

Meto (also known as Uab Meto, Dawan(ese), Timorese, or Atoni) is a cluster of closely related speech varieties spoken on the western part of the island of Timor. Meto speakers usually identify their speech as a single language and call it *uab metoʔ*, *molok metoʔ, (bahasa/uab) Timor*, or occasionally, to outsiders, *(bahasa) Dawan*. Speakers of Meto recognize roughly a dozen named varieties of Meto. These varieties themselves have named dialects, with further differences being found between different villages and hamlets of a single dialect. A map of self-identified Meto varieties is given in Figure 4.

The borders of these self-identified varieties of Meto match very closely the borders of the historic kingdoms of western Timor. Phonological, lexical, semantic and grammatical diversity among Meto varieties is not insignificant, and speakers frequently report difficulty communicating with speakers of other varieties. As a result, Kupang Malay and/or Indonesian is often used between speakers of different Meto varieties to communicate.

Figure 4: *Self-Identified Varieties of Meto*



1.2 Synchronic phonologies

Different varieties of Rote have different phoneme inventories. All (known) varieties have the five vowels /i e a o u/. Consonants occur in four places: labial, coronal, velar and glottal with up to seven manners of articulation: voiceless stop, prenasalized stop, voiced stop (often implosive), fricative, nasal and trill/tap.

Four voiceless stops /p t k ʔ/, two voiced stops /b d/ and three fricatives /f s h/ are present in all varieties. Among other series of consonants, there is variation in which segments different varieties attest. Some varieties have two liquids /l r/, while others have only a single liquid /l/. Some varieties have only two nasals /m n/, while others have /ŋ/ in addition. Some varieties have a full series of prenasalized stops /mb nd ŋg/, while others have only a partial series or lack prenasalization entirely.

There are also differences in the phonetic qualities of these consonants. In Dela-Oenale, for instance, all the voiced stops are imploded initially and medially, while in Termanu, they are only imploded intervocalically. Implosion is mostly absent in Rikou, though occasionally with intervocalic /d/. Based on two Dengka recordings made available to me by Thersia Tamelan it appears that Dengka /b/ is usually unimploded [b] while the alveolar voiced plosive is usually lightly imploded [ɗ] in Dengka. Similarly, in Ba'a the bilabial prenasalized stop is voiceless /mp/, while in other varieties, it is voiced /mb/.

All Meto varieties have the ten consonants /p t k ʔ b f s h m n/ to which most add only a single liquid /l/ or /r/. Some have both /l/ and /r/. In addition to these core consonants, most varieties also have the voiced obstruent /ʤ/. Some varieties additionally have the voiced obstruent /gw/.[2] These voiced obstruents mainly occur only in certain morphophonemic environments: before vowel initial enclitics and/or phrase finally. All voiced obstruents are realized as stops or fricatives in Meto.

Of known Meto varieties, most have five vowels /i e a o u/. The mid vowels are usually phonetically mid-low [ɛ ɔ] but are raised to mid high [e o] in certain environments, particularly before high vowels. In some varieties of Meto, this difference is becoming phonemic. See Edwards (2016a) for a more detailed description of the phonetics and phonology of the Kotos Amarasi variety of Meto.

Meto varieties have a synchronic process of final CV → VC metathesis, as seen, for instance in *fatu* → *faut* 'stone, rock' and *nope* → *noep* 'cloud'. Metathesis in Kotos Amarasi is a morphological device marking a construct case (attributive phrase) in the syntax and a resolved state of affairs in the discourse. Edwards (2016b) provides a complete description of the forms and functions of metathesis in Kotos Amarasi. For comparative purposes, this means that the first part of a compound in Meto is usually metathesized. Thus, for instance, Dela-Oenale *ʔe**su**_fani* 'sneeze' can be compared with Kotos Amarasi *n-ʔe**us**_fani* 'sneeze'.

In both Rote and Meto, vowel initial roots have an automatic initial glottal stop in certain environments. However, in other environments, they maintain a contrast between vowel initial and glottal stop initial roots. This means that we can distinguish between rules such as *p > Ø /#_ and *p > *ʔ* /#_.

In Rote languages, the contrast between glottal stop and vowel initial roots only occurs phrase medially. Phrase initially, all vowel initial roots take an automatic glottal stop. The difference can be seen with Rikou *ura-ʔ* [ˈʔʊraʔ] 'scorpion' and *ʔuse-ʔ* [ˈʔʊsɛʔ] 'navel', each of which is realised with a glottal stop phrase initially, including in isolation. However, phrase medially, no glottal stop occurs before vowel initial *ura-ʔ* 'scorpion', thus *au ura-ʔ* [ˌʔawˈʊraʔ] 'my scorpion', but a glottal stop does occur before glottal stop initial *ʔuse-ʔ* 'navel', thus *au ʔuseʔ* [ˌʔawˈʔʊsɛʔ] 'my navel'.

In Meto, glottal stop insertion occurs word initially in all environments (including phrase medially) with the contrast surfacing only after prefixation, as shown by the difference between vowel initial *isa-t* [ˈʔisʁt̪] 'most-NMLZ' → *n-isa* [ˈnisʁ] '3SG/PL-most', and glottal stop initial *ʔaʔa-t* [ˈʔaʔʁt̪] 'poetry-NMLZ' → *n-ʔaʔa* [ˈnʔaʔʁ] '3SG/PL-poetry'. See Edwards (2017) for full discussion of glottal stop insertion in the Kotos Amarasi variety of Meto.

1.3 Data

This paper presents data from the different varieties of Rote and Meto according to geographic location from west to east, with the exception of Dela-Oenale and Dengka, which are placed between the other languages of Rote and Meto.

Unless otherwise stated, PMP reconstructions are from the online Austronesian Comparative Dictionary (Blust and Trussel ongoing). Glosses in tables are for the Rote-Meto forms and not their PMP etyma, unless otherwise specified. Where the glosses are not identical (cases of semantic shift), the gloss of the PMP form is usually given in a table note. An empty table cell indicates that the reconstruction has no known reflex in the language under question. Intermediate forms between PMP and the Rote-Meto languages are indicated with a double asterisk, i.e. *basəq > **sabəq > *safe* 'wash'.

1.3.1 Sources

Most of the Rote data in this paper comes from the works of the Dutch linguist Johann C. G. Jonker, in particular his 806-page dictionary: Jonker (1908). Jonker used the speech of the Termanu variety of Rote as the basis for his dictionary but very often cites cognates from seven other 'dialects': Oenale, Dengka, Tii, Ba'a,

[2] Some varieties of Amanuban have the glides /j/ and /w/ instead of obstruents /ʤ/ and /gw/.

Korbafo, Bilbaa and Rikou. He also occasionally includes forms from other 'sub-dialects': Lole, Keka and Oepao. Rote data in this paper comes from Jonker (1908) unless otherwise indicated.

Another source of Rote data comes from work carried out by linguists associated with the Kupang based Language and Culture Unit (UBB). Particularly important is data on Dela collected and provided by Thersia Tamelan which, in addition to having forms not found in Jonker (1908), provides information on the contrast between vowel-initial and glottal-stop-initial words. Data from Dela and Oenale is given as 'Dela-Oenale' and is drawn from both Jonker (1908) and the work of Thersia Tamelan.

The final source of data for Rote comes from a week's worth of fieldwork I carried out at the beginning of November 2017 on Bilbaa, Landu, Rikou and Oepao.

Meto data in this paper has two sources. Firstly, there is data collected by the author. This data comes from about a year's worth of fieldwork, of which about eight months were spent collecting data on Kotos Amarasi. In addition, I have carried out at least a week's worth of fieldwork on each of Kopas, Timaus, Ro'is Amarasi, Amanuban, and Kusa Manea, as well as having collected less comprehensive data on Fatule'u, Amfo'an, Amanatun, Molo and Baikeno.

The second kind of Meto data in this paper comes from Middelkoop (1972), an unpublished 673-page draft dictionary of the Molo variety of Meto. This dictionary has occasional notes on forms in other varieties.

1.3.2 Transcription

Throughout this paper, data from modern day languages is transcribed phonemically according to standard IPA conventions. PMP reconstructions are transcribed with the conventional symbols used in Austronesian historical linguistics, as exemplified by Blust (2009:546). Letters with non-IPA realizations include *z = [ʤ], <*j> = [gʲ], *R = [r], *r = [ɾ], <*ñ> = [ɲ], and <*y> = [j].[3] I transcribe PMP schwa *e as *ə.

Morphemes of a single word are separated by a hyphen '-'. Phonological material analyzed as a historic morpheme, but which is not synchronically independent, is separated from the stem with a pipe. One example is PMP *sa-ŋa-puluq > Dela-Oenale *n|ulu* 'ten', in which the initial /n/ is a reflex of the historic prefix *ŋa-.

Historic compounds which cannot be analyzed as synchronic compounds due to one of the elements (or both) not occurring independently are separated by an underscore. One example is Dela-Oenale *ʔesu_fani* 'sneeze', in which the second half is a reflex of PMP *bañən 'sneeze', but in which neither element occurs independently outside this form.

Data from Middelkoop (1972) and Jonker (1908) has been re-transcribed according to phonemic principles wherever possible.[4] The only difficulty in this regard is due to underrepresentation of the glottal stop phoneme /ʔ/ in each of these works.

In most cases I have added glottal stops to my transcription of data from Middelkoop (1972) where I have evidence justifying this. Thus, for instance, Middelkoop gives 'heavy' as <*mafena*>, but this word has the form *maʔfenaʔ* with two glottal stops in my own Molo data. Where there is still doubt over the exact form of a particular word from Middelkoop (1972), it is given in angled brackets. One example is Molo <*fule*> 'foam', where my own Amarasi data with *ʔfuriʔ* 'foam' indicates the possible (but unconfirmed) presence of glottal stops in the Molo form too.

As discussed in section 1.2 above, the Rote languages have a process whereby all vowel-initial words begin with an automatic glottal stop phrase initially, such as Rikou *ura-ʔ* 'scorpion' → [ˈʔʊraʔ] initially but [ˈʊraʔ] phrase medially. Such words contrast with those in which a glottal stop occurs in all environments, such as Rikou *ʔuse-ʔ* 'navel' → [ˈʔʊsɛʔ]. Jonker (1908) does not distinguish between vowel-initial and glottal-stop-initial words and transcribed them all vowel initially; thus, Jonker (1908) gives Rikou <*uṛa*> 'scorpion' and <*use̤*> 'navel'.

In this case, I follow the analysis of Dela by Thersia Tamelan (p.c. May 2017) for Dela-Oenale and draw on my own field notes for Rikou. Distinctive initial glottal stops are transcribed in both these varieties. When an initial glottal stop is distinctive in these varieties, and cognates in other varieties of Rote are likely to have

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[3] Wolff (2010) analyzes PMP *j as a voiced velar stop, *g, and PMP <*r> as a voiced velar fricative *ɣ. In this paper, I follow the analysis of Blust (2009), which appears to align with that of most other authors. The consonant <*r> [ɾ] is not unambiguously accepted as a valid part of the PMP inventory (Wolff 1974).

[4] Both Middelkoop (1972) and Jonker (1908) transcribe sequences of two identical vowels with a single orthographic letter. In Jonker (1908), such double vowels are also marked with an acute or grave accent in certain cases according to the quality of the vowel and the placement of stress.

distinctive, but unconfirmed, glottal stops. This is indicated by a bracketed glottal stop. Thus, Dela-Oenale and Rikou *ʔali* 'dig' is cognate with Dengka *(ʔ)ali* 'dig', other Rote varieties *kali* 'dig'.

2 Consonants

Initial and medial consonant correspondences between PMP and the languages of Rote and Meto are summarized in Table 1, along with the number of attestations of each. Word-final consonants are discussed in section 1.6. Sound changes shared between West Rote (Dela-Oenale and Dengka) and Meto are indicated with boxes.

The stops *k, *b, and *p have undergone an unconditioned split word initially. Nonetheless, the split is not completely random and patterns can be discerned in the outcomes. Each of these patterns is represented by a separate row in Table 1. Where no pattern can be discerned, reflexes are separated by a slash '/' with the more common reflex first.

Table 1. *Reflexes of PMP initial and medial Consonants*

		Rote								West Rote		Meto			
PMP	**env.**	**Tii**	**Lole**	**Ba'a**	**Termanu**	**Korbafo**	**Bokai**	**Bilbaa**	**Rikou**	**Dela-O.**	**Dengka**	**Ro'is**	**Kotos**	**Molo**	**no.**
*p	#_i,ə,a	*h*	*h*	*h*	*h*	*h*	*h*	*h*	*h*	*h*	*h*	*h*	*h*	*h*	11
	#_u,ə,a	*h*	*h*	*h*	*h*	*h*	*h*	*h*	*h*	*h/Ø/ʔ*	*h/Ø/ʔ*	*h/Ø*	*h/Ø*	*h/Ø*	7
	V_V	*ʔ*	*ʔ*	*ʔ*	*ʔ*	*ʔ*	*ʔ*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø/h*	*Ø/h*	*Ø/h*	17
*t		*t*	*t*	*t*	*t*	*t*	*t*	*t*	*t*	*t*	*t*	*t*	*t*	*t*	91
*k	#_	*Ø*	*Ø*	*Ø*	*Ø*	*Ø/k*	*Ø/k*	*Ø/k*	*Ø*	*h*	*h*	*h*	*h*	*h*	9
	#_	*k*	*k*	*k*	*k*	*k*	*k*	*k*	*ʔ*	*ʔ*	*ʔ*	*h*	*h*	*h*	11
	a_	*ʔ*	*ʔ*	*ʔ*	*ʔ*	*ʔ*	*ʔ*	*k/Ø*	*ʔ/Ø*	*Ø/ʔ*	*Ø/ʔ*	*Ø*	*Ø*	*Ø*	7
	V_	*ʔ/k*	*ʔ/k*	*ʔ/k*	*ʔ/k*	*ʔ/k*	*ʔ/k*	*k*	*ʔ/Ø/k*	*ʔ/k*	*ʔ/k*	*k/ʔ*	*k/ʔ*	*k/ʔ*	28
*q		*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	50
*b	#_	*ɓ*	*ɓ*	*b*	*b*	*b*	*b*	*b*	*b*	*ɓ*	*b*	*b/f*	*b/f*	*b/f*	29
	#_	*ɓ*	*ɓ*	*b*	*b*	*b*	*b*	*b*	*b*	*f*	*f*	*f*	*f*	*f*	14
	#_	*f*	*f*	*f*	*f*	*f*	*f*	*f*	*f*	*f*	*f*	*f*	*f*	*f*	28
	V_V	*f*	*f*	*f*	*f*	*f*	*f*	*f*	*f*	*f*	*f*	*f*	*f*	*f*	19
*d	#_	*ɗ*	*ɗ*	*d*	*d*	*d*	*d*	*d*	*d*	*r*	*l*	*n*	*n*	*n*	12
	V_V	*r*	*l*	*l*	*l*	*l*	*l*	*l*	*r*	*r*	*l*	*n*	*n*	*n*	14
*g	#_	*k*	*k*	*k*	*k*	*k*	*k*	*k*	*ʔ*	*ʔ*	*ʔ*	*h/k*	*h/k*	*h/k*	2
*j [gʲ]	V_V	*ɗ*	*ɗ*	*d*	*d*	*d*	*d*	*d*	*d*	*ɗ*	*ɗ*	*r*	*r*	*l*	6
		ɗ	*ɗ*	*d*	*d*	*d*	*d*	*d*	*d*	*r*	*l*	*n*	*n*	*n*	5
*z [ʤ]		*ɗ*	*ɗ*	*d*	*d*	*d*	*d*	*d*	*d*	*ɗ*	*ɗ*	*r*	*r*	*l*	7
*m		*m*	*m*	*m*	*m*	*m*	*m*	*m*	*m*	*m*	*m*	*m*	*m*	*m*	53
*n		*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	44
*ñ [ɲ]		*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	5
*ŋ		*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	*n*	20
*s		*s*	*s*	*s*	*s*	*s*	*s*	*s*	*s*	*s*	*s*	*s*	*s*	*s*	43
*h		*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	41
*R [r]		*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	*Ø*	43
*r [ɾ]		*r*	*l*	*l*	*l*	*l*	*l*	*l*	*r*	*r*	*l*	*n*	*n*	*n*	4
*l		*l*	*l*	*l*	*l*	*l*	*l*	*l*	*l*	*l*	*l*	*n*	*n*	*n*	72

Consonant correspondences in Termanu, Korbafo, Ba'a, and Bokai are mostly the same and Termanu reflexes are usually given as representative. Likewise, the consonant correspondences in Rikou, Landu and Oepao are mostly identical and forms from Rikou are given as representative. Similarly, Tii forms are usually given as representative of both Tii and Lole. The main phonological difference between these varieties is in Tii Proto-Rote-Meto **r = *r* while in Lole **r > *l*.

Only the stops *p, *k, *b, *d, *g, *j, and *z require detailed discussion as they provide evidence for a West Rote-Meto subgroup and/or have conditioned reflexes in certain environments. The remaining consonants *t, *q, *m, *n, *ñ, *ŋ, *s, *h, *R, *r, and *l do not present any particular challenges. Examples showing the reflexes of these consonants word initially and medially are given in Table 2.

Table 2. *PMP *t, *q, *m, *n, *ñ, *ŋ, *s, *h, *R, *r, *l*

PMP	Tii	Termanu	Bilbaa	Rikou	Dela-O.	Dengka	Kotos	
***t**asik	*tasi*	*tasi*	*tasi*	*tasi*	*tasi-ʔ*	*tasi-ʔ*	*tasi*	‘sea’
*ma**t**a	*mata*	*mata*	*mata*	*mata*	*mata*	*mata*	*mata-f*	‘eye’
***q**atay	*ate-k*	*ate-k*	*ate-ʔ*	*ate-ʔ*	*ate-ʔ*	*ate-ʔ*	*ate-f*	‘liver’
*pu**q**un	*huu-k*	*huu-k*	*huu-ʔ*	*huu-ʔ*	*huu-ʔ*	*huu-ʔ*	*uu-f*	‘tree trunk’
***m**anuk	*manu*	*manu*	*manu*	*manu*	*manu*	*manu*	*manu*	‘chicken’
*a**m**a	*ama-k*	*ama-k*	*ama-ʔ*	*ama-ʔ*	*ama-ʔ*	*ama-ʔ*	*ama-f*	‘father’
***n**atuq	*natu-k*	*natu-k*	*natu-ʔ*	*natu-ʔ*	*natu-ʔ*	*natu-ʔ*	*natu-f*	‘ovary’
*i**n**um	*n-inu*	*n-inu*	*n-inu*	*n-inu*	*n-inu*	*n-inu*	*n-inu*	‘drink’
***ŋ**isŋis*†	*nisi-k*	*nisi-k*	*nisi-ʔ*	*nisi-ʔ*	*nisi-ʔ*	*nisi-ʔ*	*nisi-f*	‘teeth’
*ha**ŋ**in	*anin*	*ani, anin*	*ani*	*ani*	*anin*	*anin*	*anin*	‘wind’
***ñ**aRa	*naa-k*	*naa-k*	*naa-ʔ*	*naa-ʔ*	*naa-ʔ*	*naa-ʔ*	*nao-f*	‘woman’s brother’
*uta**ñ**a	*na-tane*	*na-tane*	*na-tane*	*na-tane*	*na-tane*	*na-tane*	*na-tana*	‘ask’
***s**akay	*saʔe*	*saʔe*	*sake*	*saʔe*	*sae*	*sae*	*n-sae*	‘go up’
*ə**s**a	*esa*	*esa*	*esa*	*esa*	*esa*	*esa*	*es*	‘one’
***h**awak*‡	*ao-k*	*ao-k*	*ao-ʔ*	*ao-ʔ*	*ao-ʔ*	*ao-ʔ*	*ao-f*	‘body’
*du**h**a	*ḍua*	*dua*	*dua*	*dua*	*rua*	*lua*	*nua*	‘two’
***R**umaq	*uma*	*uma*	*uma*	*uma*	*ume*	*ume*	*ume*	‘house’
*ta**R**um	*tau-k*	*tau-k*	*tau-ʔ*	*tau-ʔ*	*tau-ʔ*	*tau-ʔ*	*ʔ|taum*	‘indigo’
***r**akup	*raʔu*	*laʔu*	*lau*	*rau*	*rau*	*lau*	*n-nau*	‘scoop’
*tə**r**iŋ	*oo_teri-k*	*oo_teli-k*	*oo_teli-ʔ*	*oo_teri-ʔ*	*oo_teri-ʔ*	*oo_teli-ʔ*		‘k.o. bamboo’
***l**ima	*lima*	*lima*	*lima*	*lima*	*lima*	*lima*	*nima*	‘five’
*li**l**in	*lili-k*	*lili-k*	*lili-ʔ*	*lili-ʔ*	*lili-ʔ*	*lili-ʔ*	*nini|k*	‘beeswax’

† Reconstructed to PMP with the meaning ‘grin, show the teeth’.
‡ Reconstructed to PMP with the meaning ‘waist, back of the waist’.

Table 3. *PMP *p in word-medial position*

PMP	Tii	Termanu	Bilbaa	Rikou	Dela-O.	Kotos	
*p /V_V	*ʔ*	*ʔ*	Ø	Ø	Ø	Ø~*h*	
*dəpa	*reʔa*	*leʔa*	*lea*	*rea*	*ree*	*nehe*	‘fathom’
*lapaR		*na-ma-laʔa*	*na-ma-laa*	*na-ma-laa*		*na-m|naha*	‘hungry’
*hapuy	*aʔi*	*haʔi*†	*ai*	*ai*	*ai*	*ai*	‘fire’
*qapuR	*aʔo*	*haʔo*†	*ao*	*ao*	*ao*	*ao*	‘lime’
*dapuR	*raʔo*	*laʔo*	*lao*	*rao*		*auf_nao*	‘hearth’
*ma-həpi > **laməpi	*na-lameʔi*	*na-lameʔi*	*na-lamei*	*na-lamei*	*na-lamein*	*na-mnei*‡	‘dream’
*nipay§	*niʔe-k*	*neʔe-k*	*nii-ʔ*	*nii-ʔ*	*nie-ʔ*		‘ant’
*supu	*suʔu-k*	*suʔu-k*	*suu-ʔ*	*suu-ʔ*	*suu-ʔ*		‘edge’
*tapis‖		*tai_sai-k*					‘cloth’
						tais	‘sarong’

† The source of initial *h* in ‘fire’ and ‘lime’ in Termanu may result from glottal dissimilation whereby a word-initial automatic glottal stop became *h*, thus *hapuy > **[ʔ]aʔi > *haʔi* ‘fire’. Unexpected word-initial *h* only occurs before a medial glottal stop in the Rote languages.
‡ With consonant metathesis from earlier **nmei. The origin of initial historic **la- is currently unknown.
§ Reconstructed with the meaning ‘snake’.
‖ Reconstructed with the meaning ‘loincloth (?)’.

*2.1 *p*

Word medial *p becomes Ø in Dela-Oenale, Dengka, Bilbaa and Rikou. In Tii and Termanu *p becomes *ʔ* intervocalically. In Meto *p becomes Ø~*h* between vowels with eight attestations of *p > Ø and three of *p > *h*. Examples of PMP *p in intervocalic position are given in Table 3. (Dengka reflexes are not shown due to space constraints. The reflexes of *p in Dengka are the same as in Dela-Oenale.)

In the languages of Rote, apart from Dela-Oenale and Dengka, word-initial *p becomes *h* (nineteen examples), apart from some reflexes of *pusəj 'navel'. In Dela-Oenale and Dengka word-initial *p becomes *h* in twelve examples, *p becomes Ø in four examples, and *p becomes *ʔ* in two examples. Whenever PMP *p > *ʔ*~Ø in Dela-Oenale and Dengka, it is lost in Meto.

Meto appears to have *p > Ø before *u, though there are only three examples. Reflexes of PMP *p in word-initial position are given in Table 4. (Bilbaa reflexes are not shown due space constraints. The reflexes of *p word initially in Bilbaa are the same as in Termanu.)

Table 4. *PMP *p in word-initial position*

PMP	Tii	Termanu	Rikou	Dela-O.	Dengka	Molo	
*p /#_	*h*	*h*	*h*	*h/Ø/ʔ*	*h/Ø/ʔ*	*h/Ø*	
*pitu	*hitu*	*hitu*	*hitu*	*hitu*	*hitu*	*hitu*	'seven'
*pian	*hii*	*hii*	*hii*	*hii*	*hii*		'want'
						he	IRREALIS
*pija	*hiɗa*	*hida*	*hida*	*hira*			'how much?'
*pəRəq		*heʔe, hee*	*hee*	*hee*	*hee, (ʔ)ee*		'press'
*pənuq	*henu-k*	*henu-k*	*henu-ʔ*			*na-henu*	'full'
*hapəjis	*heɗîs*	*hedis*	*hedis*	*heɗîs*	*heɗîs*		'pain'
*əpat	*haa*	*haa*	*haa*	*haa*	*haa*	*haaʔ*	'four'
*panas	*hanas*	*hanas*	*hanas*	*hanas*	*hanas*		'hot'
						na-hana	'cook'
*punti	*hundi*	*huni*	*hundi*	*hundi*	*hundi*	*uki*	'banana'
*puqun	*huu-k*	*huu-k*	*huu-ʔ*	*huu-ʔ*	*huu-ʔ*	*uu-f*	'tree trunk'
*pusəj	*huse-k*	*(ʔ)use-k*	*ʔuse-ʔ*	*ʔusa-ʔ*	*(ʔ)usa-ʔ*	*usa-f*	'navel'
*sa-ŋa-puluq	*hulu*	*hulu*	*hulu*	*n|ulu*	*n|ulu*		'ten'
*qapəju	*heɗu-k*	*hedu-k*	*hedu-ʔ*	*eru-ʔ*	*elu-ʔ*	*enu-f*	'gallbladder'
*pajay	*haɗe*	*hade*	*hade*	*are*	*ale*	*ane*	'rice plant'

It is likely that PMP *p had already become **h in all positions in words in Proto-Rote-Meto, with the subsequent changes occurring after the break-up of the group. It is also possible that the loss of medial *p in Bilbaa and Rikou went through a medial **ʔ stage, as attested in Tii and Termanu. If so, then the change of medial *h > *ʔ* provides some evidence that Tii, Termanu, Bilbaa, and languages form a subgroup.

*2.2 *k*

The reflexes of PMP *k in the Rote-Meto languages are complex with a number of splits, both conditioned and unconditioned. Nonetheless, within this complexity the change *k > *h* initially, and *k > Ø after *a are shared between Dela-Oenale, Dengka and Meto and thus provide evidence for a West Rote-Meto subgroup.

Word initially PMP *k has undergone an unconditioned split with two main patterns. In the first pattern (nine examples) *k > *h* in Meto, *k > *ʔ* in Dela-Oenale, Dengka, and Rikou and *k = *k* in other varieties of Rote. In the second pattern (seven examples) *k > *h* in Dela-Oenale, Dengka, and Meto, *k > *k*~Ø in Bilbaa and *k is usually lost in other varieties of Rote though is occasionally retained as *k*. Examples of PMP *k word initially are given in Table 5.

In addition to these two main patterns, there are a small number of words in which PMP *k = *k* in all Rote-Meto languages except Rikou and, occasionally, Tii in which *k > *ʔ.* Two examples are *kawit > Rikou *ʔai*, other Rote varieties *kai*, Kotos *ʔ|kaʔi*, all 'hook',[5] and *kima > Rikou, Tii *ʔima*, other Rote varieties *kima*, Meto *kima|ʔ,* all 'clam'.

[5] Kotos Amarasi *ʔkaʔi* 'hook' contains the nominalising circumfix *ʔ-…-ʔ* of which the final part occurs as in an infix in VV# final stems (Edwards 2016b:121)

Table 5. *PMP *k in word-initial position*

PMP	Tii	Termanu, Ba'a	Korbafo, Bokai	Bilbaa	Rikou	Dela-O.	Dengka	Meto	
Pattern 1	*k*	*k*	*k*	*k*	*ʔ*	*ʔ~k*	*ʔ*	*h*	
*kali	*kali*	*kali*	*kali*	*kali*	*ʔali*	*ʔali*	*(ʔ)ali*	*n-hani*	'dig'
*kapit†	*kaɓi*	*kabi*	*kabi*	*kabi*	*ʔabi*	*ʔaɓi*	*(ʔ)abi*	*n-habi*	'clamp'
*kati‡	*kati*	*kati*	*kati*	*kati*	*ʔa~ʔati*	*ka~kati*	*(ʔ)a~(ʔ)ati*	*n-hati*	'call a dog'
*kuhkuh§	*kuku-k*	*kuʔu-k*	*kuʔu-*	*kuku-ʔ*	*ʔuʔu*	*ʔuʔu*	*(ʔ)uʔu*		'finger, toe'
								huku	'catch, grab'
*kaka	*kaka-k*	*kaʔa-k*	*kaʔa-*	*kaka-ʔ*	*ʔaʔa*	*ʔaʔa*	*(ʔ)aʔa*		'elder sibling'
*kawanan	*kona*	*kona*	*kona*	*kona*	*ʔona*	*ʔona*	*(ʔ)ona*		'right, south'
*kaRat	*kaa*	*kaa*	*kaa*	*kaa*	*ʔaa*				'bite'
*ka-wiRi	*kii*	*kii*	*kii*	*kii*	*ʔii*				'left, north'
Pattern 2	*Ø*	*Ø~k*	*Ø~k*	*k~Ø*	*Ø*	*h*	*h*	*h*	
*kutu	*utu*	*utu*	*utu*	*utu*	*utu*	*hutu*	*hutu*	*hutu*	'head-louse'
*kita	*ita*	*ita*	*ita*	*ita*	*ita*	*hita*	*hita*	*hit*	'1PL.INCL'
*kami	*ai*	*ami*	*ami*	*ami*	*ami*	*hai*	*hai*	*hai*	'1PL.EXCL'
*kahiw	*ai*	*ai*	*ai*	*kai*	*ai*	*hau*	*hau*	*hau*	'wood, tree'
*kamuyu	*ei*	*emi*	*kemi*	*kemi*	*emi*	*hei*	*hei*	*hii*	'2PL'
*kahu	*oo*	*oo*	*koo*	*koo*	*oo*	*hoo*	*hoo*	*hoo*	'2SG'
*kunij	*uni-k*	*kuni-k*	*kuni-*	*kuni-ʔ*	*uni-ʔ*	*huni-ʔ*	*huni-ʔ*	*huni|k*	'turmeric'

† With irregular *p > *b* intervocalically.
‡ Reconstructed to Proto-Central-Malayo-Polynesian (PCMP).
§ Reconstructed to PMP with the meaning 'claw, talon, fingernail'.

The reflexes of PMP *k in medial position are partially conditioned by the preceding vowel. After the low vowel *a *k usually becomes *k~Ø* in Bilbaa, *k becomes *Ø~ʔ* in Dela-Oenale, Dengka and Meto, and *k becomes *ʔ* in the other Rote languages with occasional sporadic retention of *k as *k*. That *k is usually lost after *a in West-Rote-Meto provides some evidence for subgrouping these languages. Examples of *k after *a are given in Table 6.

Table 6. *PMP *k after *a in word-medial position*

PMP	Tii	Term.	Bilbaa	Rikou	Dela-O.	Dengka	Meto	gloss
	ʔ	*ʔ*	*k~Ø*	*ʔ~Ø*	*Ø~ʔ*	*Ø~ʔ*	*Ø~ʔ*	
*sakay	*saʔe*	*saʔe*	*sake*	*saʔe*	*sae*	*sae*	*n-sae*	'go up'
*lakaw	*laʔo*	*laʔo*	*lako*	*laʔo*	*lao*	*lao*	*n-nao*	'go'
*rakup	*laʔu*	*laʔu*	*lau*	*rau*	*rau*	*lau*	*n-nau*	'scoop'
*takut					*na-matau*	*na-matau*	*na-mtau*	'afraid'
	-taʔu-k	*-taʔu*	*-taku*	*-taʔu*	*-taʔu-ʔ*	*-taʔu-ʔ*		'frighten'†
*kaka	*kaka-k, kaʔa‡*	*kaʔa-k*	*kaka-ʔ*	*ʔaʔa*	*ʔaʔa*	*(ʔ)aʔa*		'older sibling'
*baki	*ɓaʔi*	*baʔi*	*bai*	*baʔi*	*ɓaʔi*	*baʔi*		'grandfather'
*laki					*manu_lai*	*manu_lai*	*maun_nai*	'rooster'
							naʔi-f	'grandfather'

† The Rote forms given in this row all mean 'frighten, threaten' and occur with prefixes: *na-ʔa-ta~* in Dela-Oenale and Dengka, *na-ka-ta~* in Tii, Termanu and Bilbaa, and *na-ta~* in Rikou.
‡ Jonker (1908:209) gives *Tii kaka-k* 'older sibling'. Data provided by the Language and Culture Unit (UBB) has Tii *kaʔa* 'older sibling'.

After other vowels, *k is usually retained as *k* in Bilbaa. In other lects, *k has undergone a split between *k* and *ʔ* without any consistent conditioning between either vowel. In Dela-Oenale, Dengka, and Meto, *k is also occasionally lost. Furthermore, which reflex occurs in one variety is not necessarily predictive of which reflex will occur in another variety, though in general the reflexes in Tii, Ba'a, Termanu, Korbafo, and Bokai

tend to be the same. Examples of PMP *k after each of the vowels *i, *u and *ə are given in Table 7. Glosses in Table 7 are for the PMP reconstructions with semantic shifts given in the table notes.

Table 7. *PMP *k after *i, *u or *ə in word-medial position*

***gloss**	**PMP**	**Tii**	**Term.**	**Bilbaa**	**Rikou**	**Dela-O.**	**Dengka**	**Meto**
		k~ʔ	*k~ʔ*	*k*	*k~ʔ*	*k~ʔ~Ø*	*k~ʔ~Ø*	*k~ʔ~Ø*
‘tail’	*ikuR	*iko-k*	*iko-k*	*iko-ʔ*	*iko-ʔ*	*iko-ʔ*	*iko-ʔ*	*iko-f*
‘elbow’	*siku	*siʔu-k*	*siʔu-k*	*siku-ʔ*	*siku-ʔ*			*siʔu-f*
‘back’†	*likud	*liʔu_ɗea*	*liʔu_dea*	*liku_dea*	*liʔu_deas*		*liʔu_ɗeat*	*niʔu-n*
‘fish’	*hikan	*iʔa-k*	*iʔa-k*	*ika-ʔ*	*ika-ʔ*	*ʔuʔu_ia-ʔ*‡	*ia-ʔ*	*ika|ʔ*
‘nail’§	*kuhkuh	*kuku-k*	*kuʔu-k*	*kuku-ʔ*	*ʔuʔu*	*ʔuʔu*	*(ʔ)uʔu*	*huku*
‘node’	*buku	*ɓuʔu-k*	*buʔu-k*	*buku-ʔ*	*buku-ʔ*	*ɓuku-ʔ*	*buku-ʔ*	*buʔu-f*
‘open’‖	*buka	*fu~fuʔa*	*fu~fuʔa*	*fu~fuka*	*fu-fuʔa*		*fu~fuʔa*	
‘dove’	*muken	*muʔe-k*	*muʔe-k*		*muke-ʔ*	*muʔe-ʔ*	*muʔe-ʔ*	
‘shriek’	*əkit	*eki*	*eki*	*eki*	*heʔi*	*eki*		
‘gecko’	*təktək	*teke*	*teke*	*teke*	*teʔe*	*teke*	*teke*	*ʔ|teke*
‘split’¶	*bəkaq	*feʔa*	*feʔa*	*feka*	*feʔa*	*feʔa*	*feʔa*	*n-feka*
‘staff’	*təkən	*te~teʔe_ai*	*te~teʔe*	*te~teke-k*	*te~teʔe-ʔ*	*te~tea|s*	*te~tea|s*	*tea|s*

† The Rote reflexes of *likud mean ‘back support for weaver’. The Meto reflexes mean ‘back of a knife’.

‡ Dela-Oenale *ʔuʔu_ia-ʔ* is for fish in general. The usual word for ‘fish’ in Dela-Oenale is *ʔuʔu*.

§ Reconstructed to PMP with the meaning ‘claw, talon, fingernail’. The Rote reflexes of *kuhkuh mean ‘finger, toe’ and the Meto (Molo) reflex means ‘catch, grab’.

‖ The Rote reflexes mean ‘dig or work the ground around a plant’.

¶ Reconstructed to PMP with the meaning ‘split, crack open’. The Rote reflexes mean ‘pull out, wrench out’ the Meto reflex means ‘decide’.

In addition to these patterns for intervocalic *k, there are two forms in which medial *k is lost in all known varieties of Rote and Meto. These are *aku > *au* ‘1SG’ (all Rote-Meto lects) and *bukij ‘mountain, forested inland mountain areas’ > Rote *fui-k or fui-ʔ* ‘wild’ and Meto *fui* ‘wild’.[6]

Regarding *bukij, the loss of the medial consonant (even in languages which otherwise retain *k) is common in the greater Timor area, as is the semantic shift from ‘mountain, forested inland mountain areas’ to ‘wild’. Two examples are Tetun (in which medial *k > *k/ʔ* is usual) *fuik* ‘wild’ and Helong (in which medial *k > *k* is usual) *huin* ‘wild, untamed’. That the same semantic shift and the same irregular sound change co-occur in a number of languages indicates this term is probably the result of contact in this region.[7]

*2.3 *g*

There are only two reconstructions containing *g with possible reflexes in my data. The first is *gatəl ‘itch, itchy’, which has reflexes in Meto: Kotos *ma|hata|ʔ* and Molo *n-ma|hata*, both ‘itchy’.

In the Rote languages, *gatəl is probably reflected as Dela-Oenale, Dengka, Rikou *ʔete,* other Rote varieties *kete* ‘biting or burning on the tongue, spicy’. This root also occurs in Termanu (Jonker 1908:233) and Lole (UBB p.c.) with an agreement prefix as *na-kete* meaning ‘itch’. Connecting these Rote forms with PMP *gatəl requires positing irregular *a > *e* for the first vowel. If all these forms are from PMP *gatəl, then they indicate that *g has the same reflexes as PMP *k.

A second possible instance of PMP *g is found in *gəmgəm ‘fist; hold in the fist’, which may be connected with Dela-Oenale, Dengka, Rikou *ʔu~ʔumu* ‘make a fist, clench one’s fist, knead’, other Rote varieties *ku~kumu* ‘make a fist’ and Meto *n-kumu* ‘squeeze, press, wring out’. These examples require positing irregular

[6] Another possible example is *kakay/*qaqay > Rote *ei-k* or *ei-ʔ* ‘leg, foot’ and Meto *hae-f* ‘leg, foot’. However, this etymology also requires positing irregular raising of each of the vowels in Rote. (The sound correspondences are regular for PMP *kakay > Meto *hae-f*.) Wolff (2010:862) reconstructs *kakay as a variant of *qaqay.

[7] Although neither the semantic shift or the irregular sound change posited for *bukij are particularly unlikely, both co-occurring in several languages of a single region is suspicious. For the semantic shift, compare examples such as Malay *babi utan* ‘wild boar’ from *babi* ‘pig’ + *utan* ‘forest’.

*ə > *u* in all lects. While this change could be due to sporadic assimilation to the following labial consonant *m, such a change is otherwise unattested in any of the Rote-Meto languages. If these forms are reflexes of PMP *gəmgəm, it would indicate that *g has the same reflexes of *k in the Rote languages but is reflected as *k* in Meto, contradicting the data provided by *gatəl.[8]

*2.4 *b*

The usual reflexes of PMP *b in the Rote-Meto languages are *b* or *f*. Word initially, three main patterns can be identified, given in (1) below.[9] Pattern (1b) whereby *b > *f* in Dela-Oenale, Dengka and Meto provides evidence for a West Rote-Meto subgroup.

(1) a. *b = *b* #_ in all Rote-Meto languages (fourteen examples)
b. *b > *f* #_ in West Rote-Meto, but *b = *b* in other Rote (fourteen examples)
c. *b > *f* #_ in all Rote Meto languages (twenty-eight examples)

There is no conditioning environment determining this split. In this way, it is highly reminiscent of the *b > *b~β* split found in many languages of south and southeast Sulawesi (Mills 1975:273, van den Berg 1991, Mead 1998:35). Examples of *b > *b~f* are given in Table 8.

Table 8. *PMP *b Word Initially*

PMP	Tii	Termanu	Bilbaa	Rikou	Dela-O.	Dengka	Kotos	
*b /#_	*ɓ~f*	*b~f*	*b~f*	*b~f*	*f~ɓ*	*f~b*	*f~b*	
*baqi	*ɓei*	*bei*	*bei*	*bei*	*ɓei*	*bei*	*bei-f*	‘grandmother’
*bəkəlaj > **bəlaj	*ɓela*	*bela*	*bela*	*bela*	*ɓela*	*bela*	*na-ʔ|bena*	‘unroll (mat)’
*buku	*ɓuʔu-k*	*buʔu-k*	*buku-ʔ*	*buku-ʔ*	*ɓuku-ʔ*	*buku-ʔ*	*buʔu-f*	‘node, joint’
*bisul	*ɓisu*	*bisu*	*bisu*	*bisu*	*ɓisu*	*bisu*	*bisu*	‘boil, pimple’
*batu	*ɓatu*	*batu*	*batu*	*batu*	*fatu*	*fatu*	*fatu*	‘stone, rock’
*baqəRu	*ɓeu-k*	*beu-k*	*beu-ʔ*	*beu-ʔ*	*feu-ʔ*	*feu-ʔ*	*feʔu*	‘new’
*bulu	*ɓulu-k*	*bulu-k*	*bulu-ʔ*	*bulu-ʔ*	*fulu-ʔ*	*fulu-ʔ*	*funu|ʔ*	‘hair, fur’
*binəhiq	*ɓini*	*bini*	*bini*	*bini*	*fini*	*fini*	*fini*	‘seed’
*balik	*fali*	*fali*	*fali*	*fali*	*fali*	*fali*	*n-fani*	‘go back’
*bəRay	*fee*	*fee*	*fee*	*fee*	*fee*	*fee*	*n-fee*	‘give’
*bətaw	*feto-k*	*feto-k*	*feto-ʔ*	*feto-ʔ*	*feto-ʔ*	*feto-ʔ*	*feto-f*	‘man’s sister’
*bukbuk	*fufu-k*	*fufu-k*	*fufu-ʔ*	*fufu-ʔ*	*fufu-ʔ*	*fufu-ʔ*	*ʔ|fufu|ʔ*	‘weevil’

Medial PMP *b is almost universally reflected as *f* in Rote-Meto languages (eighteen examples). Two examples are *qabu ‘ash, dust’ > all Rote *afu* ‘ash, dust’, Meto *afu* ‘soil, ground, floor’ and *təbuh > all Rote-Meto *tefu* ‘sugarcane’.

*2.5 *d*

Word initially and medially *d becomes *r* in Dela-Oenale, *d becomes *l* in Dengka and *d becomes *n* in Meto. In other Rote languages *d is retained as *d* word initially but is weakened word medially. Medial *d becomes *r* in Tii and Rikou and medial *d becomes *l* in Lole, Termanu and Bilbaa. I have twelve instances of initial *d and fourteen instances of medial *d showing these sound changes. Examples are given in Table 9.

[8] A additional possible reflex of PMP *g is fund in the following forms from Rote: Dela-Oenale *ka~karu*, Dengka, *ʔa~ʔalu*, Termanu, Bilbaa *ka~kalu* and Rikou *ʔa~ʔaru*, all meaning ‘scratch’. These Rote forms are reflexes of PMP *karut ‘scrape, rasp’ and/or *garus ‘scratch’.

[9] In addition to the three major patterns in (1) there are also three examples in which *b = *b* in all varieties of Rote but *b > *f* in Meto and two examples in which *b > *f* in Rote but *b = *b* in Meto.

Table 9. *PMP *d in initial and medial position*

PMP	Tii	Termanu	Bilbaa	Rikou	Dela-O.	Dengka	Kotos	
*d /#_	*ɗ*	*d*	*d*	*d*	*r*	*l*	*n*	
*daRaq	*ɗaa-k*	*daa-k*	*daa-ʔ*	*daa-ʔ*	*raa-ʔ*	*laa-ʔ*	*naa|ʔ*	‘blood’
*daləm	*ɗale-k*	*dale-k*	*dale-ʔ*	*dale-ʔ*	*rala-ʔ*	*lala-ʔ*	*nana|ʔ*	‘inside’
*dahun	*ɗoo-k*	*doo-k*	*doo-ʔ*	*doo-ʔ*	*roo-ʔ*	*loo-ʔ*	*noo-f*	‘leaf’
*diRus	*na-ɗiu*	*na-diu*	*na-diu*	*na-diu*	*na-riu*	*na-liu*	*na-niu*	‘bathe’
*duha	*ɗua*	*dua*	*dua*	*dua*	*rua*	*lua*	*nua*	‘two’
*duRi†	*ɗui-k*	*dui-k*	*dui-ʔ*	*dui-ʔ*	*rui-ʔ*	*lui-ʔ*	*nui-f*	‘bone’
*d /V_V	*r*	*l*	*l*	*l*	*r*	*l*	*n*	
*sida	*sira*	*sila*	*sila*	*sila*	*sira*	*sila*	*sin*	‘3pl’
*ma-qudip	*mori*	*moli*	*moli*	*moli*	*mori*	*moli*	*n-moni*	‘live (v.)’
*anaduq	*manaru*	*manalu*	*manalu*	*naru-ʔ*	*naru-ʔ*	*nalu-ʔ*	*m|nanu|ʔ*	‘long’
*də**d**ap	*ɗeras*	*delas*	*dela-ʔ*	*deras*	*relas*‡	*lelas*	*ʔ|nenes*	‘Erythrina sp.’
*ma-udəhi	*muri-k*	*muli-k*	*muli-ʔ*	*muri-ʔ*	*muri-ʔ*	*muli-ʔ*	*na-muni*	‘last’

† Reconstructed to PMP with the meaning ‘thorn, splinter, fish bone’.

‡ Dela-Oenale has irregular medial *d > *l* in the reflex of *dədap. Possible sporadic dissimilation from earlier **reras.

As already noted briefly by Mills (1991:259), the changes affecting PMP *d in the Rote-Meto languages can be unified into a four-stage pathway, given in (2) below.

(2) *d > *r* > *l* > *n*

Different languages have followed this pathway to different extents in different environments. West Rote-Meto has undergone *d > *r* in all word positions. Dengka-Meto subsequently took the second step of **r > *l*, and Meto then took the final step of *l > *n*. The other languages of Rote have only started this pathway word medially. Tii and Rikou have only taken the first step of *d > *r* while Lole, Termanu and Bilbaa have undergone the next step of *r > *l*.

The change *r > *l* probably arose once in Rote and spread by diffusion across subgroup boundaries, much in the same way the change *r > ʁ ~ ʁ̞ spread in Europe (Trudgill 1974:220ff). As a result, those varieties spoken on the periphery of Rote island are unaffected; Dela-Oenale in the west, Tii in the south-west and Rikou in the east. This change probably occurred in, or spread to, Dengka-Meto before the break up of this subgroup. Evidence that Meto shared the change *d > *r > *l* with Dengka rather than undergoing *d > *r > *n* directly is shown by the change of PMP *l > *n* in Meto. Two examples are *lima > *nima* ‘five’ and *lilin > *nini|k* ‘beeswax’. The shared change of *d > *r > *l* in Dengka and Meto is phonological evidence that these languages form a subgroup. While this is a common change, it aligns with a small number of other shared features between these languages.[10]

Without evidence from other Austronesian languages, and considering only the reflexes of word medial *d in the Rote-Meto languages, we can reconstruct *r in this position for proto-Rote-Meto. It is likely that PMP *d had already changed to *r word medially by the time of proto-Rote-Meto.

*2.6 *z*

PMP *z is reflected as *d* in the Rote languages and as either *r* or *l* in Meto, according to variety. Ro'is Amarasi and Kotos Amarasi in the southwest, as well as Kusa-Manea in the far east, have *z > *r*, while other varieties of Meto have undergone subsequent *r > *l*. Reflexes of PMP *z are given in Table 10. We cannot posit that *z merged with *d at the stage of Proto Rote-Meto, as the reflexes of these proto-phonemes are distinct in West-Rote-Meto. Instead, we can posit that *z > *d in West Rote-Meto after *d/*j > *r in this branch.

[10] In addition to the change of PMP *d > *r* > *l*, Dengka and Meto also share five lexical items. The Proto-Dengka-Meto lexical items are *see ‘address, warn’, *ŋgaha ‘no, not’, *ɗeʔu ‘sacred, awful’, *ponia ‘sacrifice’, and *ka-ɓatus ‘sea-snail’. A connection between Dengka and Meto is also acknowledged by some Meto speakers who report that they have limited understanding of Dengka.

Table 10. *PMP *z*

PMP	Tii	Term.	Rikou	Dela-O.	Dengka	Kotos	Molo	
*z	*ɗ*	*d*	*d*	*ɗ*	*ɗ*	*r*	*l*	
*zalan	*ɗala-k*	*dala-k*	*dala-ʔ*	*ɗala-ʔ*	*ɗala-ʔ*	*ranan*	*lalan*†	‘way’
*zauq	*ɗoo-k*	*doo-k*	*doo-ʔ*	*ɗoo-ʔ*	*ɗoo-ʔ*	*na-ʔ|roo*	*ʔ|loo-b*	‘far’
*zəlay	*ɗele*	*dele*	*dele*	*ɗele*	*ɗele*			‘Job’s tears’
*quzan	*uɗan*	*udan*	*uda*	*ʔuɗan*	*(ʔ)uɗan*	*uran*	*ulan*	‘rain’
*haRəzan	*eɗa-k*	*eda-k*	*eda*	*ʔe~ʔeɗa-ʔ*	*ʔe~ʔeɗa-ʔ*	*era|ʔ,era|k*	*ela|k*	‘ladder’
*tuzuq	*na-tuɗu*	*na-tudu*	*na-tudu*	*na-tuɗu*	*na-tuɗu*	*n-ruru*‡	*n-lulu*	‘point’

† Medial *l* in Molo *lalan* ‘way’ is a result of subsequent *n > *l* /lV_. This is a regular sound change in Molo and several other northern varieties of Meto. Amanuban has *lanan* ‘way’.

‡ Meto has undergone irregular initial *t > *r in this form. Perhaps sporadic assimilation.

*2.7 *j*

PMP *j has undergone an unconditioned split in the Rote-Meto languages. There are two main patterns among Rote-Meto languages for PMP *j. In the first pattern, attested in five instances, *j has the same reflexes as word initial *d, that is, *j > *r* in Dela-Oenale, *j > *l* in Dengka, *j > *n* in Meto and *j > *d* in the remaining Rote languages. These five examples provide additional evidence for a West Rote-Meto subgroup. The second pattern is for PMP *j > to have the same reflexes as *z, that is *d* in the Rote languages and *r~l* in Meto. This pattern is unambiguously attested in two instances.

The reflexes of *bujəq ‘foam’ do not fit into either of these two patterns. For this form, *j patterns like initial *d in Rote but merges with *z in Meto. The reason for this is unclear, but perhaps is due to irregular lenition of *d in Dela-Oenale and Dengka, after the break up of Proto-West Rote-Meto. Examples of PMP *j are given in Table 11. Examples in which *j patterns like initial *d in West Rote and Meto are indicated by the dotted line.

Table 11. *PMP *j*

PMP	Tii	Term.	Bilbaa	Rikou	D.-O.	Dengka	Kusa-Manea	Kotos	
*j /V_V	*ɗ*	*d*	*d*	*d*	*r~ɗ*	*l~ɗ*	*n~r*	*n~r*	
*pajay	*haɗe*	*hade*	*hade*	*hade*	*are*	*ale*	*ane*		‘rice plant’
*qaləjaw	*leɗo*	*ledo*	*ledo*	*ledo*	*relo*†	*lelo*	*neno*		‘sun’
								neno	‘day, sky’
*qapəju	*heɗu-k*	*hedu-k*	*hedu-ʔ*	*hedu-ʔ*	*eru-ʔ*	*elu-ʔ*	*enu-f*	*enu-f*	‘gallbladder’
*ŋajan	*naɗe-k*	*nade-k*	*nade-ʔ*	*nade-ʔ*	*nara-ʔ*	*nala-ʔ*	*kana-f*	*kana-f*	‘name’
*pija	*hiɗa*	*hida*	*hida*	*hida*	*hira*		*hian*‡		‘how much’
*bujəq	*fuɗe-k*	*fude-k*	*fude-ʔ*	*fude-ʔ*	*fure-ʔ*	*fule-ʔ*	*fa~fura-f*	*ʔfuriʔ*	‘foam’
*huaji	*fadî-k*	*fadi-k*	*fadi-ʔ*	*fadi-ʔ*	*ʔodî-ʔ*	*(ʔ)odî-ʔ*	*ori|ʔ*	*ori-f*	‘y. sibling’
*bajaq§	*na-faɗa*	*na-fada*	*na-fada*	*na-fada*	*na-faɗe*	*na-faɗe*			‘speak, say’
								n-fareʔ	‘ridicule’
*hapəjis	*heɗîs*	*hedis*	*hedi-ʔ*	*hedis*	*heɗîs*	*heɗis*			‘pain’
*qajəŋ >									
*ka-qajəŋ	*k|aɗe-k*	*k|ade-k*	*k|ade-ʔ*	*ʔ|ade-ʔ*	*k|aɗe-ʔ*	*k|aɗe-ʔ*			‘charcoal’
*ijuŋ	*(ʔ)iɗu-k*		*idu-ʔ*‖	*idu-ʔ*					‘nose’
		pana_idu							‘nostrils’
					ʔiɗu	*(ʔ)iɗu*			‘kiss’
*maja	*maɗa*	*mada*	*mada*	*mada*	*maɗa*	*maɗa*			‘dry up’

† Dela-Oenale *relo* has consonant metathesis from earlier **lero.

‡ Kusa-Manea *hian* has final CV → VC metathesis. The unmetathesized form *hina is not yet attested in my data.

§ PMP *bajaq is reconstructed with the meaning ‘know, understand; ask, inquire’.

‖ The Bilbaa and Rikou forms *idu-ʔ* come from my own field notes.

2.8 Final consonants

Most word final consonants in have been lost in Rote-Meto. My current database contains 238 consonant final PMP reconstructions with a Rote-Meto reflex. The final consonant is retained in only 16% of these reflexes.

Before I discuss this figure in detail, however, it is necessary to discuss the Rote nominal suffix *-k/-ʔ* as one possible source of this suffix is re-analysis of an original root final consonant. In the vast majority of cases, this explanation is insufficient to explain all the data.

Many nouns and adjectives in the Rote languages have a word final suffix *-k* or *-ʔ*. In Tii, Lole, Ba'a, Keka and Termanu this suffix is *-k*, while in Dela-Oenale, Tii, Korbafo, Bilbaa, Rikou and Oepao, this suffix is *-ʔ*. One function of this suffix is to mark the end of a noun phrase. Thus, this suffix does not occur on nouns modified by another noun or adjective.[11] Some examples of noun-modifier phrases from Termanu are given in Table 12.

Table 12. *Termanu Nominal -k*

Noun		**Modifier**		**Phrase**	**gloss**
lima-k ‘hand/arm’	+	*kuʔu-k* ‘finger/toe’	→	*lima kuʔu-k*	‘finger’
lima-k ‘hand/arm’	+	*dale-k* ‘inside’	→	*lima dale-k*	‘palm’
ei-k ‘leg/foot’	+	*kuʔu-k* ‘finger/toe’	→	*ei kuʔu-k*	‘toe’
ei-k ‘leg/foot’		*buʔu-k* ‘joint’	→	*ei buʔu-k*	‘ankle’
neʔe-k ‘ant’	+	*ŋgeo-k* ‘black’	→	*neʔe ŋgeo-k*	‘black ant’
timi-k ‘jaw’	+	*dui-k* ‘bone’	→	*timi dui-k*	‘jaw-bone’

While the citation (= phrase final) form of each of the nouns and adjectives in Table 12 takes the suffix *-k*, when modified, they do not take this suffix. When multiple modifiers occur, only the last noun/adjective takes this suffix. One Termanu example is *lima-k* ‘arm/hand’ + *kuʔu-k* ‘finger/toe’ + *ina-k* ‘mother; big’ → *lima kuʔu ina-k* ‘thumb’. This suffix also appears to play a role in the derivation of nouns or adjectives. See Jonker (1906:263–268) for more discussion of the functions of this suffix.

Not all nouns and adjectives occur with this suffix. Instead, it is lexically restricted. Thus, for instance, Termanu *bafi* ‘pig’ and *manu* ‘chicken’ are both vowel final and the forms **bafi-k* and **manu-k* do not occur (Jonker 1906:264).

Proposing that the *-k/-ʔ* suffix results from re-analysis of an original root final consonant does not explain all of the data. This suffix occurs frequently on nouns for which no historic final consonant has been reconstructed, and the reflexes of vowel final reconstructions frequently take this suffix.

My database currently has 221 PMP reconstructions with a nominal or adjectival meaning which also have a reflex in at least one of the Rote languages. Of the consonant final nominal reconstructions, 63% (99/157) occur with the suffix *-k/-ʔ*. Among vowel final nominal reconstructions, 59% (38/64) occur with this suffix. Examples of each possible pattern of ± historic final consonant and ± nominal suffix *-k/-ʔ* are given in Table 13.

Meto cognates of words which take the nominal suffix *-k/-ʔ* in Rote often have a final *k* or *ʔ*. These final consonants are not synchronic affixes in Meto. Of the nouns which take the nominal suffix *-k/-ʔ* for which a Meto cognate has also been identified, 37% (42/115) of the Meto cognates have a final *k* or *ʔ*.[12]

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[11] When modified by another noun or adjective, the suffix *-k/-ʔ* never occurs on the head noun. However, a noun followed by certain other modifiers does occur with this suffix. Thus, for instance, it occurs with numerals. One example is Termanu *bula-k* ‘month’ + *telu* ‘three’ → *bula-k telu* ‘three months’ (Jonker 1908:615). The places in the noun phrase in which this suffix does not occur appear to be the same as those in which metathesis occurs in some varieties of Meto, as described in Edwards (2016b:228–285).

[12] In Tetun there are nominal derivational affixes *k(a)-…-k* and *-k* (van Klinken 1999:81f). This Tetun *-k* is probably also cognate with the Rote nominal suffix *-k/-ʔ*.

Table 13. *(Non-)Final Consonants and -k/-ʔ Suffix*

PMP	Tii	Termanu	Bilbaa	Rikou	Dela-O.	Dengka	Meto	
*C = Ø /_# (37%)								
*manuk	*manu*	*manu*	*manu*	*manu*	*manu*	*manu*	*manu*	‘chicken’
*səksək	*sese*	*sese*	*sese*	*sese*	*sesa*	*sesa*	*na-ʔ|sesa*	‘crammed’
*Rumaq	*uma*	*uma*	*uma*	*uma*	*ume*	*ume*	*ume*	‘house’
*V = Ø /_# (41%)								
*mata	*mata*	*mata*	*mata*	*mata*	*mata*	*mata*	*mata-f*	‘eye’
*batu	*ɓatu*	*batu*	*batu*	*batu*	*fatu*	*fatu*	*fatu*	‘stone, rock’
*hadiRi	*ɗii*	*dii*	*dii*	*dii*	*rii*	*lii*	*nii*	‘post, pole’
*C = -k/-ʔ /_# (63%)								
*qayam†	*ae-k*	*ae-k*	*ae-ʔ*	*ae-ʔ*	*ae-ʔ*	*ae-ʔ*	*aem*	‘tame’
*hikan	*iʔa-k*	*iʔa-k*	*ika-ʔ*	*ika-ʔ*	*ʔuʔu_ia-ʔ*	*ia-ʔ*	*ika|ʔ*	‘fish’
*kunij	*uni-k*	*kuni-k*	*kuni-ʔ*	*uni-ʔ*	*huni-ʔ*	*huni-ʔ*	*huni|k*	‘turmeric’
*V = -k/-ʔ /_# (59%)								
*qa-lima	*lima-k*	*lima-k*	*lima-ʔ*	*lima-ʔ*	*lima-ʔ*	*lima-ʔ*	*ʔ|nima-f*	‘hand/arm’
*bulu	*ɓulu-k*	*bulu-k*	*bulu-ʔ*	*bulu-ʔ*	*fulu-ʔ*	*fulu-ʔ*	*funu|ʔ*	‘hair, fur’
*duRi‡	*ɗui-k*	*dui-k*	*dui-ʔ*	*dui-ʔ*	*rui-ʔ*	*lui-ʔ*	*nui-f*	‘bone’

† Reconstructed to PWMP with the meaning ‘domesticated animal’.
‡ Reconstructed to PMP with the meaning ‘thorn, splinter, fish bone’.

The ratios of nouns/adjectives with and without the nominal suffix *-k/-ʔ* in the Rote languages are nearly identical for forms reconstructed with and without a final consonant. While some instances of the *-k/-ʔ* suffix may be a result of re-analysis of an original root final consonant, this cannot explain all of the data.[13] In the remainder of this section, I will treat Rote nouns which take the suffix *-k/-ʔ* as having vowel final roots.

Having shown that the Rote nominal suffix *-k/-ʔ* is not a retention of an earlier consonant, I am now in a position to discuss the details of final consonant loss and retention in the Rote-Meto languages. Of the 238 consonant-final PMP reconstructions which have a reflex in one or more of the Rote-Meto languages, 16% (38/238) have a reflex of the final consonant.

When we exclude instances in which the final consonant is *h, *q or *R—consonants which are also lost initially and medially—this figure improves with 24% of final consonants retained (36/153).[14] When we exclude instances in which the Meto data is ambiguous—Meto retaining more final consonants than Rote—this figure improves further with 34% (36/107) of final consonants being retained.[15]

Of these final consonant retentions, twelve are retentions of *s, five are retentions of *t, four are retentions of *m, five are retentions of *k, two are retentions of *ŋ, and eight are retentions of *n. These figures are summarized in Table 14.

[13] There about a dozen examples in which the *-k/-ʔ* suffix may be re-analysis of an original root final consonant. Two are PMP *bukbuk ‘weevil’ > Rote *fufu-k* or *fufu-ʔ* ‘weevil’, Molo <*fufuk*> ‘weevil’, Kotos Amarasi *ʔfufuʔ* and *hawak ‘waist’ > Rote *ao-k* or *ao-ʔ* ‘body’, and Meto *ao-f* ‘body’.

[14] There is one instance in which a final *q appears to be retained in Meto as *h* and one instance in which *R is retained as *h*. These are *buaq ‘fruit; areca palm and nut’ > *puah* ‘areca nut’ and *niur ‘coconut’ > *noah* ‘coconut’. These reflexes show additional irregularities in Meto including irregular *b > *p* and *iu > *oa*. Similar irregularities occur in the cognates of these forms for many other languages of the region, and they are probably not direct, ‘normal’ inheritances from PMP but a result of contact with an intermediate language.

[15] The data relating to final consonants in Meto may be ambiguous due to Meto not having a reflex of the reconstruction or due to the Meto reflex having been only attested with a genitive suffix. Genitive suffixes appear to replace any final consonant of the stem in Meto (Edwards 2016b:123).

Table 14. *Rates of Final Consonant Retention*

final consonant retained	36/107	34%
final *s retained	12/21	57%
final *m retained (as *m*~*n*)	4/11	36%
final *t retained	5/15	33%
final *n retained	8/40	20%
final *k retained (as *h*~*ʔ*)	5/28	18%
final *ŋ retained (as *n*)	2/14	14%
final *p, *b, *d, *j, *l retained	0/34	0%

Meto is more conservative in the retention of final consonants that the Rote languages with Dela-Oenale and Dengka being more conservative than the other Rote languages. The Rote languages which are least conservative in retaining final consonants are Korbafo, Bilbaa, and Bokai. In particular, all instances of final *s in my current database have been lost in Korbafo, Bilbaa, and Bokai.

Table 15. *Examples of Final Consonant Retention*

PMP	**Termanu**	**Bilbaa**	**Rikou**	**Dela-O.**	**Dengka**	**Kotos**	
*quzan	*udan*	*uda*	*uda*	*ʔuɗan*	*(ʔ)uɗan*	*uran*	‘rain’
*haŋin	*ani, anin*	*ani*	*ani*	*anin*	*anin*	*anin*	‘wind’
*bulan	*bula-k*	*bula-ʔ*	*bula-ʔ*	*fulan*	*fula-ʔ*	*funan*	‘moon’
*qutan	*uta-k*	*uta_ai doo*	*uta_ai doo*	*uta-ʔ*	*uta-ʔ*	*utan*[a]	‘vegetables’
*tabuqan	*teke_fua-k*					*atfuan*	‘wasp’
*taqun	*teu-k*	*teu-ʔ*	*teu-ʔ*	*too*	*too(-ʔ)*	*toon*	‘year’
*zalan	*dala-k*	*dala-ʔ*	*dala-ʔ*	*ɗala-ʔ*	*ɗala-ʔ*	*ranan*	‘way’
*ma-qitəm						*metan*[b]	‘black’
*qayam[c]	*ae-k*	*ae-ʔ*	*ae-ʔ*	*ae-ʔ*	*ae-ʔ*	*aem*	‘tame’
*taRum	*tau-k*	*tau-ʔ*	*tau-ʔ*	*tau-ʔ*	*tau-ʔ*	*ʔ|taum*	‘indigo’
*tiRəm	*ti~tia-k*	*ti~tia-ʔ*	*ti~tia-ʔ*	*ti~tia-ʔ*	*ti~tia-ʔ*	*tiam*[d]	‘oyster’
*ma-diŋdiŋ [e]	*ma-ka-lini*	*ma-ka-lini*	*marini*	*ma-ʔa-rini*	*ma-ʔa-lini*	*mai|nikin*	‘cold’
*anak	*ana*	*ana*	*ana*	*ana*	*ana*	*anah*	‘child’
						anaʔ	‘small’
*nunuk		*nunu-ʔ*	*nunu-ʔ*			*nunuh*	‘banyan’
*miñak	*mina*	*mina*	*mina*	*mina*	*mina*	*minaʔ*	‘fat, oil’
*habaRat	*oe_faa-k*	*oe_faa-ʔ*	*oe_faa-ʔ*	*oe_faat*	*oe_faat*	*oe_faat* [d]	‘monsoon’
*uRat	*ula-k*	*ula-ʔ*	*ura-ʔ*	*ura-ʔ*	*ua-ʔ*	*ua-f*	‘palm lines’[f]
	ua-k	*ua-ʔ*	*ua-ʔ*	*ua-ʔ*	*ua-ʔ*	*uat*	‘veins’
*hapəjis	*hedis*	*hedi-ʔ*	*hedis*	*heɗis*	*heɗis*		‘pain’
*ma-nipis	*niʔis*	*nii-ʔ*	*niis*	*niʔis*	*niʔis*	*mai|nihas*	‘thin’
*ma-panas	*hanas*	*hana-ʔ*	*hanas*	*hanas*	*hanas*		‘hot’
						manas	‘sun’
*təRas	*tea, teas*	*tea*	*tea*	*tee-ʔ*	*tee-ʔ*	*teas*	‘heartwood’
*belas[g]	*felas*	*fela-ʔ*	*felas*	*felas*	*felas*	*belas*	‘machete’
*ma-həmis	*mamis*	*mami-ʔ*	*mamis*	*mamis*	*mamis*		‘insipid’
*nuəs	*nuus*	*nuu-ʔ*	*nuus*	*nuus*	*nuus*		‘squid’
*tapis	*tai_sai-k*						‘cloth’
						tais	‘sarong’

a Ro'is Amarasi has the cognate *utu|k* or *uta|k* with the meaning ‘pumpkin, squash’.
b Kusa-Manea has *metom* ‘black’ with final *m = *m*.
c *qayam is reconstructed to PWMP with the meaning ‘domesticated animal’.
d Meto *tiam* ‘oyster’ and *oe_faat* ‘rainy season, west monsoon’ are only known from Jonker (1908).
e The reconstruction *ma-diŋdiŋ ‘cold’ comes from Zorc (1995:1119).
f The Rote reflexes of *uRat meaning ‘palm lines’ (apart from Dengka) have irregular *R > *r* ~ *l*.
g Blust and Trussel (ongoing) reconstruct *belas to PCMP, though based only on greater Timor cognates.

Examples final consonant retention are given in Table 15. Tii cognates are not shown due to space constraints. Final consonant reflexes in Tii are the same as those in Dela-Oenale. The Korbafo and Bokai

cognates are closer to Bilbaa in regards to final consonants than they are to Termanu. This is one of the main differences between Korbafo and Bokai on the one hand and Termanu on the other hand.

3 Vowel and glides

In this section, I discuss the reflexes of PMP vowels and glides in the Rote-Meto languages. I also discuss the reflexes of vowel sequences and sequences of glides and vowels. The principal vowel and glide correspondences in the Rote-Meto languages are summarized in Table 16. Varieties of Rote not shown in Table 16 have correspondences identical to those of Tii, Termanu, Bilbaa and Rikou. Changes shared between Dela-Oenale, Dengka and Meto are indicated in boxes.

Table 16. *Reflexes of PMP vowels and glides*

PMP	env.		Tii	Termanu	Bilbaa	Rikou	Dela-O.	Dengka	Meto	no.
*a		>	*a*	*a*	*a*	*a*	*a*	*a*	*a*	148
	/_#	>	*a*	*a*	*a*	*a*	*a*	*a*	*a*	34
	/_#	>	*a*	*a*	*a*	*a*	*e*	*e*	*e*	15
	/ñ_	>	*e*	*e*	*e*	*e*	*e*	*e*	*i/a*	4
*u		>	*u*	*u*	*u*	*u*	*u*	*u*	*u*	188
	/_R#	>	*o*	*o*	*o*	*o*	*o*	*o*	*o*	5
*i		>	*i*	*i*	*i*	*i*	*i*	*i*	*i*	111
	/_R#	>	*e*	*e*	*e*	*e*	*e*	*e*	*e*	3
*ə	/σ̲σ#	>	*e*	*e*	*e*	*e*	*e*	*e*	*e*	47
	/σσ̲#	>	*e*	*e*	*e*	*e*	*a*	*a*	*a*	18
	/_q#	>	*e*	*e*	*e*	*e*	*e*	*e*	*e*	4
*wa	#_	>	*fa/o*	*fa/o*	*fa/o*	*fa/o*	*o/fa*	*o/fa*	*o/fa*	11
*wa,*aw,*au	_#	>	*o*	*o*	*o*	*o*	*o*	*o*	*o*	20
*ya		>	*e/a*	*e/a*	*e/a*	*e/a*	*e/a*	*e/a*	*e/a*	6
*ay,*ai		>	*e*	*e*	*e*	*e*	*e*	*e*	*e*	18
*yu, *uy		>	*i*	*i*	*i*	*i*	*i*	*i*	*i*	6
*iw		>	*i*	*i*	*i*	*i*	*u/i*	*u/i*	*u*	2

3.1 High vowels

The high vowels *i and *u are retained without change in all Rote-Meto languages, except before a word final *R. Two examples of *u = *u* are *tuktuk > all Rote-Meto *tutu* 'beat, pound' and *baRu > Rote *bau* and Meto *fau*, both 'Sea hibiscus; *Hibiscus tiliaceus*'. Two examples of PMP *i = *i* are *lilin > Rote *lili-k* or *lili-ʔ*, Meto *nini|k*, both 'wax' and *waRi 'day; sun' > Rote *fai* 'day, time', Meto *fai* 'night'.

Before a final *R, the high vowels *i and *u are usually lowered to *e* and *o* respectively. Final *R was subsequently lost. Examples are given in Table 17. In addition to the eight examples in which a final high vowel lowered before *R, words, there are six in which final *i or *u did not lower before *R. In all six of these examples both vowels are high vowels. Thwo examples are *tuquR 'evaporate, dry up' > Nuclear Rote *tuu-k* or *tuu-ʔ* 'dry', and *muRmuR > Dela-Oenale, Dengka *na-ʔa-mumu*, Rikou *na-mumu*, other Rote varieties *na-ka-mumu* 'gargle'.

Table 17. *PMP V+high > V+mid /_r#*

PMP	Tii	Termanu	Bilbaa	Rikou	Dela-O.	Dengka	Meto	
*ikuR	*iko-k*	*iko-k*	*iko-ʔ*	*iko-ʔ*	*iko-ʔ*	*iko-ʔ*	*iko-f*	'tail'
*qapuR	*aʔo*	*haʔo*	*ao*	*ao*	*ao*	*ao*	*ao*	'lime'
*dapuR > **rapuR	*raʔo*	*laʔo*	*lao*	*lao*			*auf_nao*	'hearth'
*qatəluR	*tolo-k*	*tolo-k*	*tolo-ʔ*	*tolo-ʔ*	*telo-ʔ*	*telo-ʔ*	*teno|ʔ*	'egg'
*wahiR	*oe*	*oe*	*oe*	*oe*	*oe*	*oe*	*oe*	'water'
*bibiR†	*ɓifi_doo-ʔ*	*difa_doo-k*	*bife_doo-ʔ*	*bifi_doo-ʔ*	*ɓife*			'lips' 'edge'

† The irregularities in the Termanu reflex (*b > *d* and *i > *a*) are probably due this form only occurring with *doo-k* 'leaf'. Korbafo has regular *bife_doo-ʔ* 'lips. Retention of final *i in Tii and Rikou may be due to the preceding *i.

*3.2 *a*

The vowel *a is retained as *a* in Rote-Meto languages in nearly all instances. I have collected one hundred instances of *a = *a* in penultimate syllables and eighty-two instances of *a = *a* in final syllables. An example of each can be seen in *ama > all Rote *ama-k/ama-ʔ*, Meto *ama-f* 'father'.

While the overwhelming pattern is for *a to be retained unchanged in the Rote-Meto languages, there are also fifteen examples of *a > *e* in word final open syllables in Dela-Oenale, Dengka and Meto. This includes syllables which became open after the loss of a final consonant.

These fifteen examples of *a > *e* in final open syllables stand against thirty-four instances in which final *a in an open syllable is retained as *a*. This change provides additional evidence for identifying a West Rote-Meto subgroup. Examples of *a > *e* in final open syllables in West Rote-Meto are given in Table 18. (Rikou reflexes are not shown due to space constraints.)

Table 18. *PMP *a > e /_# in West Rote-Meto*

PMP	Tii	Termanu	Bilbaa	Dela-O.	Dengka	Kotos	
*ma-iRaq	*mea*	*mea*	*mea*	*mee*	*mee*	*meʔe*	'red'
*dəpa	*reʔa*	*leʔa*	*lea*	*ree*	*lee*	*nehe*	'fathom'
*kəRa	*kea*	*kea*	*kea*	*ʔee*	*(ʔ)ee*	*kee, kea*	'turtle'
*ləŋah†	*lena*	*lena*	*lena*	*lene*	*lene*		'sesame'
*qatiməla		*teke_mela-k*	*teke_mela-ʔ*	*mele-ʔ*	*mele-ʔ*		'flea'
*səlaR	*sela-k*	*sela-k*	*sela-ʔ*	*sele-ʔ*	*sele-ʔ*		'coarse, large'
*Rumaq	*uma*	*uma*	*uma*	*ume*	*ume*	*ume*	'house'
*tumah	*tuma*	*tuma*	*tuma*	*tume*	*tume*	*tume*	'clothes louse'
*tuna	*tuna*	*tuna*	*tuna*	*tune*	*tune*	*tune*	'eel'
*tuba	*tufa*	*tufa*	*tufa*	*tufe*		*tufe*	'Derris elliptica'
*ma-hataq	*mata-k*	*mata-k*	*mata-ʔ*	*mate-ʔ*	*mate-ʔ*	*n-mate*	'raw'
*qaRta‡	*ata*	*ata*	*ata*	*ate*	*ate*	*ate*	'slave, servant'

† Reconstructed by Zorc (1995:1128). Jonker (1908:296) gives the Meto cognate *nene-l.*

‡ Blust and Trussel (ongoing) reconstruct *qaRta to PMP with the meaning 'outsiders, alien people'. Wolff (2010:591) reconstructs *qaRətaq with the meaning 'person'. Mahdi (1994:464–468) assigns the meaning 'person (of own race)' to this form.

Beyond the observation that this change occurs only in open syllables, it is difficult to state a conditioning environment in which this change occurs. Nonetheless, there do appear to be some phonological patterns in which words undergone this change. Firstly, this change is almost entirely regular in West Rote-Meto when the penultimate vowel is *e* (nine examples).[16] Secondly, there are four examples of this change occurring after *u followed by a stop, usually a nasal stop. Of these examples, three begin with *t*. While this is not a natural conditioning environment it is indicative of the change spreading by diffusion through the lexicon to phonologically similar words. (There are also four examples in which *a = *a* after *u*.) Finally, there are two examples of this change happening after *at*, though it does not occur in the reflexes of *mata 'eye', which is reflected as *mata-* in all Rote-Meto languages.

When the vowel *a occurs in final syllables after *ñ, it is raised to a front vowel in the Rote languages, though there are only two examples: *utaña > all Rote *na-tane* 'ask' but Meto *na-tana* 'ask', and *añam 'braid (mats, baskets, etc.)' > Tii and Ba'a *n-ane* 'braid', Termanu, Bilbaa, and Rikou *ane* 'braid'. In the case of *añam, the Molo variety of Meto attests *n-ani* 'braid' with a final front vowel.[17]

[16] There are only two exceptions: PMP *əsa > all Rote *esa* 'one', Meto *esa ~ es* 'one', and PMP *ma-əsa 'alone' (from the same root) > all Rote *mesa* 'alone'. For *ma-əsa Meto, has *n-mese* 'alone' with expected final *e*.

[17] There are also indications that final *a > *e* to some extent after *j. There are two examples. The first is *ŋajan > non-West Rote *nade-k* or *nade-ʔ* 'name', but Dela-Oenale *nara-ʔ*, Dengka *nala-ʔ*, both 'name' and Meto *kana-f* 'name, clan'. The second example is *suja 'pitfall of sharpened bamboo' > Dela-Oenale *sure-ʔ*, Dengka *sule-ʔ*, Tii *sure-k*, Termanu *sule-k*, Bilbaa *sule-ʔ*, Rikou *suri-ʔ,* all 'something pointed, like a thorn, which is used as a caltrop', and Meto *suni|ʔ* 'fighting sword'. These forms attest irregular *j > Proto-Rote-Meto *r.

*3.3 *ə*

In non-final syllables PMP *ə > *e*. There are forty-seven examples in my database. Two examples are *bətaw > Rote *feto-k* or *feto-ʔ,* Meto *feto-f* 'sister of a man', and *təbuh > all Rote-Meto *tefu* 'sugarcane'.

In final syllables, there is a difference between West Rote-Meto and the other Rote languages: in West Rote-Meto usually final *ə > *a*, while in other Rote languages *ə > *e*. There are eighteen examples of *ə > *a* word finally in West Rote-Meto in my current database.[18] Examples are given in **Table *19***.

Table 19. *Examples of *ə in Final SylLables*

PMP	Tii	Termanu	Rikou	Dela-O.	Dengka	Kotos	
*ə /σσ#	*e*	*e*	*e*	*a*	*a*	*a*	
*daləm	*dale-k*	*dale-k*	*dale-ʔ*	*rala-ʔ*	*lala-ʔ*	*nana|ʔ*	'inside'
*sumaŋəd	*samane-k*	*samane-k*	*samane-ʔ*	*samana-ʔ*	*mana-ʔ*	*smana-f*	'spirit'
*Rəndəm	*ende*	*ene*	*ende*	*ʔenda*	*(ʔ)enda*	*na-ʔaeka|ʔ*	'soak'
*təkən	*te~teʔe_ai*	*te~teʔe-k*	*te~teʔe-ʔ*	*te~tea|s*	*te~tea|s*	*tea|s*	'staff'
*pusəj	*huse-k*	*(ʔ)use-k*	*ʔuse-ʔ*	*ʔusa-ʔ*	*(ʔ)usa-ʔ*	*usa-f*	'navel'
*quləj	*ule-k*	*ule-k*	*ule-ʔ*	*ula*	*ula*		'worm'
						ka|una|ʔ	'snake'
*alutən		*haʔi_lute-k*				*ai_nuta|ʔ*	'firebrand'

The main exception to the change of final *ə > *a* in West Rote-Meto is before the consonant *q. In this environment *ə is reflected as *e*. There are a handful of examples in my database, five of which are given in Table 20. Evidence that this is a true conditioning environment is indicated by the fact that in other languages of Timor *ə is also raised before final *q. Thus, Tetun has *bujəq > *furin* 'foam', *basəq > *fase ~ fasi* 'wash and *daRəq > *rai* 'earth, soil, ground'. In Tetun, *ə is normally reflected as *a* word finally, such as in *quləj > *ular* 'worm, caterpillar, larva'.

Table 20. *PMP *ə > e /_q#*

PMP	Tii	Termanu	Bilbaa	Rikou	Dela-O.	Dengka	Amanuban	
*ə /_q#	*e*	*e*	*e*	*e*	*e*	*e*	*e*	
*bujəq	*fuɗe-k*	*fude-k*	*fude-ʔ*	*fude-ʔ*	*fure-ʔ*	*fule-ʔ*	*fule|ʔ*	'foam'
*basəq >**səbəq	*safe*	*safe*	*safe*	*safe*	*safe*	*safe*	*n-safe*	'wash'
*daRəq	*ɗae*	*dae*	*dae*	*dae*	*rae*	*lae*	*nai|n*†	'soil, land'
*tanəq	*tane*	*tane*	*tane*	*tane*	*tane*	*tane*		'mud'
*pəRəq	*hee*	*heʔe, hee*	*hee*	*hee*	*hee*	*hee, ee*		'press out'

† Meto *daRəq > *nai|n* has subsequent unexplained raising of *e > *i*.

‡ PMP *tanəq is reconstructed with the meaning 'earth, soil, land'.

3.4 Vowel sequences and sequences of glides and vowels

In this section, I discuss the reflexes of vowel sequences and sequences of glides and vowels in the Rote-Meto languages. I also include here sequences such as *ahi, in which the medial consonant was lost at an early stage resulting in the sequence developing as a sequence of two vowels.

The reflexes of the PMP glides *w and *y depend on the vowels they occur with. Word initially the glide *w is only attested before *a in my current database. In this environment, there is a split with *wa > *o ~ fa*. There are two examples in which *wa > *fa* in all lects, three in which *wa > *o* in all lects, and two in which *wa > *o* in West Rote-Meto but *wa > *fa* in the other Rote languages. These seven examples are given in Table 21.

[18] There are five examples in which Dela-Oenale and Dengka have final *ə > *e*. Of these three have cognates in Meto. Two of these Meto cognates have final *ə > *a* and one has *ə > *e*.

Table 21. *Examples of PMP *wa in initial position*

PMP	Tii	Termanu	Bilbaa	Rikou	Dela-O.	Dengka	Molo	
*wa /#_	*fa~o*	*fa~o*	*fa~o*	*fa~o*	*o~fa*	*o~fa*	*o~fa*	
*wahiR	*oe*	*oe*	*oe*	*oe*	*oe*	*oe*	*oe*	‘water’
*waRi†	*hoi*	*hoi*	*hoi*	*hoi*	*hoi*	*hoi*	*n-hoi*	‘dry in sun’
*wakaR	*oka-k*	*oka-k*	*oka-ʔ*	*oka-ʔ*	*ʔoka-ʔ*	*(ʔ)oka-ʔ*		‘roots’
*wani	*fani*	*fani*	*fani*	*fani*	*oni*	*oni*	*oni*	‘bee’
*huaji > **waji	*fadî-k*	*fadi-k*	*fadi-ʔ*	*fadi-ʔ*	*ʔodî-ʔ*	*(ʔ)odî-ʔ*	*oli-f*	‘younger sibling’
*waRi†	*fai*	*fai*	*fai*	*fai*	*fai*	*fai*		‘day, time’
							fai	‘night’
*walu	*falu*	*falu*	*falu*	*falu*	*falu*	*falu*	*fanu*	‘eight’

† Reconstructed to PMP with the meaning ‘day; sun, dry in the sun’. The initial *h* in the reflexes meaning ‘dry in the sun’ in Rote-Meto reflexes may be a reflex of the causative prefix *pa-. Compare Tetun Fehan *hawai* ‘dry in the sun’ and Tetun Foho *wain* ‘day’.

In other environments, *wa > *o* in all Rote-Meto languages. This is also the usual reflex of *aw, *au, *ahu and *aqu. Examples are given in Table 22.[19] When reduction of a vowel sequence or a sequence of a glide and vowel affects the only vowel of a root (i.e. *dahun ‘leaf’, *zauq ‘far’), the resulting vowel is doubled in order to meet the requirement that lexical roots in the Rote-Meto languages should be disyllabic. See section 4.1 for more discussion of the formation of disyllables.

Table 22. *PMP *wa, *aw, *au, *ahu, *aqu*

PMP	Tii	Term.	Bilbaa	Rikou	Dela-O.	Dengka	Kotos	
*siwa	*sio*	*sio*	*sio*	*sio*	*sio*	*sio*	*seo*	‘nine’
*sawa	*kai_sao*	*kai_sao*			*ai_sao*	*ai_sao*	*ʔ|sao*	‘viper’
*lakaw	*laʔo*	*laʔo*	*lako*	*laʔo*	*lao*	*lao*	*n-nao*	‘go’
*panaw	*ha~hano*	*ha~hano*	*ha~hano*	*ha~hano*	*hano*	*hano*	*ʔ|hano*	‘rash, tinea’
*qauR	*oo*	*oo*	*oo*	*oo*	*ʔoo*	*(ʔ)oo*	*oo*	‘bamboo’
*zauq	*ɗoo-k*	*doo-k*	*doo-ʔ*	*doo-ʔ*	*ɗoo-ʔ*	*ɗoo-ʔ*	*na-ʔ|roo*	‘far’
*dahun	*ɗoo-k*	*doo-k*	*doo-ʔ*	*doo-ʔ*	*roo-ʔ*	*loo-ʔ*	*noo-f*	‘leaf’
*kahu	*oo*	*oo*	*koo*	*oo*	*hoo*	*hoo*	*hoo*	‘2sg’
*ma-qudip	*mori*	*moli*	*moli*	*mori*	*mori*	*moli*	*n-moni*	‘live’
*ma-quban	*mofa*	*mofa*	*mofa*	*mofa*	*mofa*	*mofa*	*mofa*	‘gray hair’

The vowel-glide sequence *ay > *e* in all Rote-Meto languages. This is also the usual reflex of *ai and *ahi. The combination *ya > *e ~ a*. Examples of *ay, *ai, *ahi and *ya are given in Table 23. The combination *aqi usually becomes *ei* or *ai* in the Rote-Meto languages. Two examples are *taqi > all Rote-Meto *tei* ‘feces’ and *baqi > all Rote *bei*, Meto *bei-f* ‘grandmother’. One exception to this is *ma-qitəm > Meto *metan* ‘black’.

The glide and vowel sequences *uy and *yu are usually reflected as *i* (seven examples). There are only two instances of final *iw in my current database: in one *iw > *i* in all the Rote languages and in the other *iw > *u* in West Rote-Meto but *iw > *i* in the other Rote languages. Examples are given in Table 24.

[19] There are a handful of exceptions to the normal change of *a(q)u > *o*: PMP *tau ‘person’ > all Rote *tou-k* or *tou-ʔ* ‘man, male’, Meto *too* ‘populace’, *taqun > Dela-Oenale *too*, Dengka *too(-ʔ)*, Meto ‘toon’, other Rote variety *teu-k* or *teu-ʔ* ‘year’. Additionally, *maRuqanay ‘male’ is reflected with initial *o* in Dela-Oenale, Dengka *mone* ‘male’, Meto *mone* ‘husband, male’, and Tii and Ba'a *mone_feu-k* ‘son-in-law’. The Rote languages (including West Rote, Tii and Ba'a) also have *mane-k* or *mane-ʔ* meaning ‘prince, king, princely’.

Table 23. *Examples of PMP *ay, *ai, *ahi, *ya*

PMP	Tii	Termanu	Bilbaa	Rikou	Dela-O.	Dengka	Kotos	
*sakay	*saʔe*	*saʔe*	*sake*	*saʔe*	*sae*	*sae*	*n-sae*	‘go up’
*qatay	*ate-k*	*ate-k*	*ate-ʔ*	*ate-ʔ*	*ate-ʔ*	*ate-ʔ*	*ate-f*	‘liver’
*sai	*see*	*see*			*se|ka, see*	*see*	*se|kau*	‘who?’
*bahi†							*fee*	‘wife’
*ma-həyaq	*mae*	*mae*	*mae*	*mae*	*mae*	*mae*	*n-mae*	‘shy’
*qayam‡	*ae-k*	*ae-k*	*ae-ʔ*	*ae-ʔ*	*ae-ʔ*	*ae-ʔ*	*aem*	‘tame’
*maya§	*maa-k*	*maa-k*	*maa-ʔ*	*maa-ʔ*	*maa-ʔ*	*maa-ʔ*	*maa-f*	‘tongue’
*layaR	*laa*	*laa*	*laa*	*laa*	*laa*	*laa*		‘sail’

† Reconstructed to PMP with the meaning ‘female, woman, wife; female of animals’.
‡ Reconstructed to PWMP with the meaning ‘domesticated animal’.
§ Reconstructed to PCEMP.

Table 24. *PMP *uy, *yu, *iw*

PMP	Tii	Termanu	Bilbaa	Rikou	Dela-O.	Dengka	Meto	
*babuy	*ɓafi*	*bafi*	*bafi*	*bafi*	*fafi*	*fafi*	*fafi*	‘pig’
*tuluy	*tuli*	*tuli*	*tuli*	*tuli*	*tuli*	*tuli*		‘stop by’
*hapuy	*aʔi*	*haʔi*	*ai*	*ai*	*ai*	*ai*	*ai*	‘fire’
*duyuŋ >								
**ruyuŋ†	*rui-k*	*lui-k*	*lui-ʔ*	*rui-ʔ*	*rui-ʔ*	*lui-ʔ*	*lui*	‘dugong’
*laRiw	*lai~lai*	*lai~lai*	*lai~lai*	*lai~lai*	*lai~lai*	*lai~lai*		‘quickly’
*kahiw	*ai*	*ai*	*kai*	*ai*	*hau*	*hau*	*hau*	‘wood, tree’

† Blust and Trussel (ongoing) reconstruct *ruyuŋ to PCEMP. While this form accounts for irregular *d > *r ~ l* #_ in Rote, it cannot account for Helong *duiŋ* ‘dugong’ (Jonker 1908:332) which is an unambiguous reflex of *duyuŋ. The Meto form *lui* is only attested in the etymological notes in Jonker (1908:332). It has irregular *d/*r > *l* (we would expect *n*) and is, perhaps, a later borrowing.

4 Formation of Disyllables

The canonical root shape in the Rote-Meto languages is disyllabic. The only roots which can contain only one vowel are functors (i.e. words with grammatical uses). All other roots have at least two syllables. PMP reconstructions with more than two syllables are usually reduced to two syllables in the Rote-Meto languages through deletion of a vowel.

In my current database, there are 51 PMP trisyllables with a reflex in at least one of the Rote-Meto languages. Of these, only six are not reduced to a disyllable in all Rote-Meto languages. These six forms are given in Table 25.

Table 25. *Unreduced PMP Trisyllables*

PMP	Termanu	Bilbaa	Dela-O.	Dengka	Meto	
*ma-diŋdiŋ†	*ma-ka-lini*	*ma-ka-lini*	*ma-ʔa-lini*	*ma-ʔa-lini*	*mai|nikin*	‘cold’
*ma-nipis	*niʔis*	*nii-ʔ*	*niʔis*	*niʔis*	*mai|nihas*	‘thin’
*ma-tuqah‡	*matua*	*matua*				‘big; size’
*sumaŋəd	*samane-k*	*samane-ʔ*	*samana-ʔ*	*mana-ʔ*	*smana-f*	‘soul’
*bayawak§	*baʔiafa*	*baiafa*	*ɓaiafa*	*baiafa*	*bai(ʤ)afa*	‘monitor lizard’
*baŋkudu§	*manukudu*	*manukudu*	*manuʔudu*	*manaʔudu*	*ʔbakʔuruʔ*	‘Morinda citrifolia’

† Reconstructed by Zorc (1995:1119).
‡ Reconstructed to PMP with the meaning ‘old, of people; very, extremely; to die, dead (euphemism)’
§ *bayawak and *baŋkudu are reconstructed by Blust and Trussel (ongoing) to PWMP. The Meto form *bai(ʤ)afa* ‘monitor lizard’ is given in etymological notes in Jonker (1908:23). Timaus, which has undergone a *ʤ > *r* sound change, has *bairafa* ‘monitor lizard’. The form *ʔbakʔuruʔ* is Kotos Amarasi and has irregular *d > *r*. Molo has <*ba(u)kulu*>.

*4.1 Trisyllables with initial *a*

Of the 51 PMP trisyllables in my current database, 43 (86%) have *a as the first syllable. The most common pattern for trisyllables with an initial *a is for this vowel to be deleted. This occurs in 60% (25/41) of all instances. Examples are given Table 26.

Table 26. *Examples of *a > Ø /σ̲σσ#*

PMP	Tii	Termanu	Bilbaa	Rikou	D.-O.	Dengka	Kotos	
*baqəRu	*ɓeu-k*	*beu-k*	*beu-ʔ*	*beu-ʔ*	*feu-ʔ*	*feu-ʔ*	*feʔu*	‘new’
*balabaw	*lafo*	*lafo*	*lafo*	*lafo*	*lafo*	*lafo*	*k|nafo*	‘mouse, rat’
*hapəjis	*hedîs*	*hedis*	*hedi-ʔ*	*hedis*	*hedîs*	*hedîs*		‘pain’
*ma-putiq	*muti_foe-k*	*muti_foe-k*†						‘white spots’
							muti|ʔ	‘white’
*ma-qəti	*meti*	*meti*	*meti*	*meti*	*meti*	*meti*	*n-meti*	‘low tide’
*qaləjaw	*ledo*	*ledo*	*ledo*	*ledo*	*relo*‡	*lelo*		‘sun’
							neno	‘day, sky’
*qapəju	*hedu-k*	*hedu-k*	*hedu-ʔ*	*hedu-ʔ*	*eru-ʔ*	*elu-ʔ*	*enu-f*	‘gallbladder’
*qatəluR	*tolo-k*	*tolo-k*	*tolo-ʔ*	*tolo-ʔ*	*telo-ʔ*	*telo-ʔ*	*teno|ʔ*	‘egg’
*qanitu	*nitu*	*nitu*	*nitu*	*nitu*	*nitu*	*nitu*	*nitu*	‘spirit’
*tabuni	*funi-k*	*funi-k*			*huni-ʔ*	*huni-ʔ*		‘afterbirth’
*tabuqan		*teke_fua-k*					*a|tfuan*	‘wasp’

† The form *muti_foe-k* is from Ba'a.

‡ With consonant metathesis from earlier **lero.

In addition to these examples, there are four examples in which an initial *ma- merges with a following high vowel to form mid vowel: *ma-iRaq > Dela-Oenale, Dengka *mee*, other Rote variety *mea*, Kotos Amarasi *meʔe*, Amanuban *meeʔ,* ‘red’, *ma-qitəm > Kusa-Manea *metom*, other Meto *metan* ‘black’, *ma-qudip > Dela-Oenale, Tii, Rikou *mori*, other Rote variety *moli*, Meto *n-moni* ‘live’, and *ma-quban > all Rote-Meto *mofa* ‘gray/white hair’.

In another four examples, the central vowel *ə has been deleted instead of an initial *a. These four examples are *ma-buhək > Rote *mafu-k* or *mafu-ʔ*, Meto *n-mafu* ‘drunk’, *ma-həmis > Korbafo, Bokai, Bilbaa *mamiʔ,* other Rote variety *mamis* ‘insipid’, *qahəlu > Rote *alu-k* or *alu-ʔ*, Kotos Amarasi *hanu|k* ‘pestle’, and *ma-həyaq > Rote *mae*, Meto *n-mae* ‘shy, ashamed’.

There are also two examples in which an initial *a in a trisyllable is preserved. The final two vowels are identical, and either could have been deleted to yield the observed reflexes. These two examples are *kamuyu > Dela-Oenale and Dengka *hei*, Tii and Ba'a *(ʔ)ei*, Termanu and Rikou *(ʔ)emi,* Korbafo, Bokai and Bilbaa *kemi*, Kusa-Manea *hei*, other Meto *hii* ‘2PL’ and *Rabiqi > Dela-Oenale and Dengka *afis*, Tii *afi-k*, Ba'a *afi-k=aa*, Kotos Amarasi *afi_naa* ‘yesterday’.

4.2 Other trisyllables

Once we have accounted for the six PMP trisyllables which are unreduced in all Rote-Meto languages (see Table 25) and those in which the first vowel is *a, there are nine remaining trisyllables to be accounted for. Of these, five are reduced to a disyllable by deletion of the central vowel *ə, two are reduced to a disyllable through deletion of an initial *u, and one is reduced through deletion of the final vowel. These nine examples are given in Table 27..

Finally, the reflexes of PMP *bituqən > **bintuqən ‘star’ in the Rote-Meto languages are somewhat exceptional: Dela-Oenale, Dengka *nduu-ʔ*, Tii, Lole, Ba'a, Termanu *nduu-k*, Korbafo *nduu-ʔ*, Bokai *luu-k*, Bilbaa *luu-ʔ,* Landu *fanduu-ʔ,* Rikou *ruu-ʔ*, Ro'is Amarasi *fruun*, Kotos Amarasi *kfuun*, Molo *kfuun, fkuun.* These forms point to proto-Rote-Meto **fanduun, in which the final schwa assimilated to the quality of the previous vowel with the initial vowel then being deleted.

Table 27. *PMP Trisyllables*

PMP	Tii	Term.	Bilbaa	Rikou	Dela-O.	Dengka	Kotos	
*bəkəlaj	*ɓela*	*bela*	*bela*	*bela*	*ɓela*	*bela*	*na-ʔ|bena*	‘unroll’
*bəRəqat†	*ɓera-k*	*bera-k*	*bela-ʔ*	*bera-ʔ*	*ɓera-ʔ*	*bela-ʔ*	*maʔ|fena|ʔ*	‘heavy’
*binəhiq	*ɓini*	*bini*	*bini*	*bini*	*fini*	*fini*	*fini*	‘seed’
*bitiəs	*ɓiti_ ɓoa-k*	*biti_ boa-k*	*biti_ boa-ʔ*	*biti_ boa-ʔ*	*fiti_ ɓoa-ʔ*	*fiti_ isi*	*fiti-f*	‘calf (leg)’
*buqəni	*ɓu~ɓuni*	*bu~buni*	*buni*	*bu~buni*	*ɓuni*	*buni*	*hune*	‘ringworm’
*um-utaq‡	*muta*	*muta*	*muta*	*muta*	*muta*	*muta*	*n-muta*	‘vomit’
*utaña	*na-tane*	*na-tane*	*na-tane*	*na-tane*	*na-tane*	*na-tane*	*na-tana*	‘ask’
*quhənap§	*une-k*	*une-k*	*une-ʔ*	*une-ʔ*	*una-ʔ*	*una-ʔ*		‘scale’

† With irregular *R = **r in Proto-Rote-Meto.

‡ Kotos Amarasi *n-muta* only refers to vomiting of a baby

§ Blust and Trussel (ongoing) also reconstruct *qunəp to PCEMP.

4.3 Words greater than a trisyllable

There are also nine cognate sets in my current database of words reconstructed to PMP with more than three syllables, given in Table 28. Of these, the first six in Table 28 are more or less straightforwardly reduced to a disyllable by vowel deletion. Of the remaining three, *qatiməla ‘flee’ has been reduced through deletion of the first two syllables, though with subsequent compounding with *teke* in Termanu and Bilbaa, also attested in other insect terms in Rote, such as PMP *tabuqan > Termanu *teke_fua-k* ‘wasp’. The reflexes of *qali-matək ‘leech’ have initial *kelu* or *(ʔ)elu* which could be connected (irregularly) with reconstructed initial *qali-.

The reflexes of *kali-wati ‘earthworm’ show reduction of the medial sequence *awi > *a* with retention of the initial *ka in Termanu and Bilbaa. Retention of initial *ka in this case is probably due to it being reanalyzed as a prefix *ka-, which occurs on a number of terms referring to “creepy-crawlies”.

Table 28. *Reconstructions greater than three syllables*

PMP	Termanu	Bilbaa	Dela-O.	Dengka	Kotos	
*ma-udəhi†	*muli*	*muli*	*muri*	*muri*	*mone|ʔ*	‘west’ ‘outside’
*ma-udəhi†	*muli-k*	*muli-ʔ*	*muri-ʔ*	*muri-ʔ*	*muni|f*	‘youngest’
*maRuqanay	*mane*	*mane*	*mone*	*mone*	*mone*	‘male’
*sa-ŋa-puluq	*hulu*	*hulu*	*n|ulu*	*n|ulu*		‘ten’
*sa-ŋa-Ratus	*n|atu|n*	*n|atu|n*	*n|atu|n*	*n|atu|n*	*n|atu|n*	‘hundred’
*qalu-hipan‡	*li~liʔa-k*	*li~lia-ʔ*	*li~lia-ʔ*	*li~lia-ʔ*		‘centipede’
*qatiməla	*teke_mela-k*	*teke_mela-ʔ*	*mele-ʔ*	*mele-ʔ*		‘flea’
*qali-matək	*kelu_matu-k*	*kelu_matu-ʔ*		*(ʔ)elu_mutu-ʔ*		‘leech’
*kali-wati	*ka|lati-k*	*ka|lati-ʔ*	*la~lati-ʔ*	*la~lati-ʔ*		‘earthworm’

† Blust and Trussel (ongoing) reconstruct PCEMP *m-udi ‘last, come after or behind; late, later; future; stern of a boat; youngest child; west; young; outside’. This form accurately accounts for the Rote forms *muri* or *muli* meaning ‘west’ as well as the Rote-Meto reflexes meaning ‘youngest’. (Meto also has *na-muni* ‘come from behind’ which would be a reflex of *m-udi). However, PCEMP *m-udi cannot account for Meto *mone|ʔ* ‘outside’. The first vowel of this form would regularly come from *au, as attested in PMP *ma-udəhi. The final vowel of this Meto form comes from reduction of final *əhi > *e*.

‡ Blust and Trussel (ongoing) reconstruct PCEMP *qalipan.

5 Rote-Meto within Malayo-Polynesian

There is one sound change found exclusively within Rote-Meto when compared with other languages of the region. This is the change of word initial PMP *w > *f ~ o*.

Table 29. *Correspondences in Languages of Greater Timor*

PMP	***p-**	***-p-**	***b-**	***-b-**	***d-**	***-d-**	***-j-**	***z**	***ñ**	***ŋ**	***R-**	***-R-**	***w-**	***ə**
Rote-Meto	h	*h	b/f	f	d	*r	*d/*r	*ʤ	n	n	Ø	Ø	f/o	e
Tetun	h	h > ʔ	f	h	r	r	r	d	n	n	Ø	Ø	w	o
Waimaha	h	h/Ø	w	Ø	r	r	r	d	n	n	Ø	Ø	w	e
Midiki	h	h	w	h	r	r	r	Ø		n		Ø	w	e
Habun	h	h	w	b	r	r	r	y		n	Ø	Ø	w	o
Galolen	Ø/h	Ø/h	h	h	r	r	l	s		n	Ø	Ø	w	e
Lakalei	Ø/h	Ø/h	h	h	r	r	l/r	r		n		Ø	w	e
Idate	Ø/h	Ø	h	h	r	r	l	r		n		r	w	e
Makuva	h	Ø	h	Ø	d	r	r	ʤ	n	n	r	r	w	e
Ili'uun	Ø	Ø	h	h	r	r	Ø	s	n	n	r	r	Ø	e
Dadu'a	Ø	Ø	w	w	r	r	Ø/l	r	n	n	r	r	Ø	e
Leti	Ø	Ø	β	β	r	r	r	t	n	n	r	r	ww	e/o
Tela-Masbuar	Ø	Ø	w	b	r		Ø	Ø		n	Ø	Ø/r	w	e
Kemak	p/Ø	p	h/Ø	h	r	r	l	l	n	g	Ø	Ø	b	e
Welaun	h	h	f	h	l	l	l	s		k	Ø	Ø	w	o
Tokodede	p	p	h	h	r	r	l	r		g	Ø	Ø	Ø	e
Mambae	f	f	h	f/h	r	r	l/r	s	n	k/g	Ø	r/Ø	o/Ø	e
Helong	Ø	h/Ø	b	h	d	l	l	l	n/ŋ	ŋ	Ø	l	f >p	e
Hawu	p/Ø	p/Ø	ɓ/β	β	r	r	ɗ/r	ʃ	ɲ	ŋ	Ø	Ø	Ø	ə

Helong, in western Timor, has the similar and partially overlapping change of *w > *f*. While the Bolok and Semau dialects attest *w > *p*, as seen in *walu > *palu* 'eight' and *hawak > *apa* 'body, self', the Funai dialect has *w > *f*, as seen in *walu > *falu* 'eight' and *hawak > *afa* 'body, self'. Given the Funai data, the likely sound change in Semau and Bolok involves fortition of *w > *f* > *p*. Helong has undergone the change *w > *f (> p)* in all word positions, while in Rote-Meto it mainly only occurs word initially, and even then not in all lexical items. That Helong has completed *w > *f*, while Rote-Meto has not, is indicative of this change diffusing from Helong to Rote-Meto. This thus weakens the phonological evidence for identifying Rote-Meto as a distinct subgroup within Malayo-Polynesian.

Nonetheless, the *split* of PMP *w > *f~o* is not found in other languages of the region and thus does provide support for a distinct Rote-Meto subgroup. To clinch the argument that the Rote-Meto languages form a distinct subgroup, the phonological evidence must be triangulated with the lexical and morphological evidence.[20] The main differentiating sound correspondences in most languages of Timor and a number of other languages in this region are summarized in Table 29.[21]

Further afield, the merger of PMP *n, *ñ and *ŋ > *n* provides evidence for a group containing most languages of Timor: Rote-Meto, Tetun, Waimaha, Midiki, Habun, Galolen, Lakalei, Idate, Makuva, as well as several languages of nearby islands: Ili'uun (Wetar island), Dadu'a (Atauro island) Leti (Leti island), and Tela-Masbuar (Babar island). Supporting evidence for this group comes from the change *p > *h*, often with subsequent loss of **h > Ø.

Based on initial evidence, Mills (1991) proposed the existence of such a group. Similarly, based on lexical evidence, Hull (1998) proposed a group containing these languages.[22] The evidence from exclusively shared

[20] There is strong lexical evidence for a Rote-Meto subgroup with 201 lexical items so far identified as exclusive to these languages. There is also at least some morphological evidence, with the nomilizer(s) *-t/-s* apparently found exclusively in Rote-Meto.

[21] The correspondences in Table 29 were extracted from lexical data in the following sources: Tetun (Morris 1987), Waimaha (Himmelmann et al. 2006), Midiki, Habun, Lakalei and Idate (Virginia Dawson p.c. 2014), Galolen (Joao Cristo Rei and Mark Donohue p.c. July 2012), Makuva (van Engelenhoven 2009), Ili'uun (de Josselin de Jong 1947), Dadu'a (Penn 2006), Leti (van Engelenhoven 2004:17), Tela-Masbuar (Taber 1993), Tokodede (Marian Klamer 2002, Field notes on Tokodede), Kemak and Welaun (own fieldnotes), Mambae (Grimes et al. 2014), Helong (Misriani Balle and Staurt Cameron p.c. May 2015), and Hawu (Grimes et al. 2008).

[22] Hull (1998) does not appear to have considered the data from the islands east of Timor. He also included Helong in his 'Group A Western' subgroup along with Meto and Rote. Such a group is not supported by sound changes.

sound changes supports the identification of a Timor-Wetar-Babar subgroup. However, this Timor-Wetar-Babar subgroup excludes five languages of Timor: Helong in western Timor, as well as Kemak, Welaun, Tokodede, and Mambae in central Timor. These latter four languages can be grouped together as the Central Timor subgroup based on the shared change of *ŋ > *g*, with subsequent *g > *k* in Welaun and some Mambae. Supporting sound changes for the Central Timor subgroup probably include *j > *l*, *b > *f* and *d > *r*.

While this Central Timor subgroup may ultimately be shown to be more closely related to the Timor-Wetar-Babar subgroup than other subgroups, such evidence will probably come from shared lexical or morphological innovations. Examination of the sound correspondences does not yield any convincing shared phonological innovations which would unite these two subgroups. Within the Timor-Wetar-Babar group, Tetun, Waimaha, Midiki, Habun, Galolen, and Lakalei can be placed in a single Eastern Timor subgroup on the basis *R > Ø. However, Rote-Meto cannot also be placed in this Eastern Timor group as final high vowels were lowered before loss of final *R (see section 3.1). That this lowering did not take place in other languages of Timor shows that the loss of PMP *R in Rote-Meto was completed after Rote-Meto split from the Eastern Timor languages. Makuva and Idate are also excluded from the Eastern Timor subgroup.

6 Conclusion

In this paper, I examined the historical phonology of the Rote-Meto languages from a top-down perspective. I compared existing PMP reconstructions with their reflexes in the modern Rote-Meto languages and identified the sound changes. This revealed six sound changes which are shared by Dela-Oenale and Dengka in western Rote and the Meto cluster on the Timor mainland. On the basis of these sound changes, we can identify a West Rote-Meto subgroup. Within this subgroup, Meto is most closely related to Dengka as both share the merger of PMP *l and Proto-Rote-Meto *r to Proto-Dengka-Meto *l. Furthermore, there are three sound changes shared by the other languages of Rote which allow us to identify a Nuclear Rote subgroup.

I also examined the position of the Rote-Meto family within the Timor region more broadly. Shared phonological innovations allow identification of a Timor-Wetar-Babar subgroup, but this subgroup excludes Helong—the Austronesian language geographically closest to Rote and Meto—as well as Kemak, Welaun, Tokodede, and Mambae which form a Central Timor subgroup.

Examining a map of the region (see Figure 2), we are somewhat surprised that the nearest relatives of the Meto cluster are at the western end of Rote island—the part farthest away from the Timor mainland. There are three possible reasons for this:

1. Meto is a more recent arrival on the Timor mainland with its homeland in Dengka.
2. West Rote-Meto once covered all of Rote extending out to the Timor mainland. Nuclear Rote is a more recent arrival geographically splitting the members of West Rote-Meto.
3. West Rote is a more recent arrival on Rote island with its homeland on the Timor mainland.

Solution three can be excluded as there is no strong evidence that Dela-Oenale and Dengka form a subgroup apart from Meto. If these western Rote languages were recent movements from Timor, we would expect them to have undergone a more recent period of common development.

At the current stage I favour solution one over solution two. In addition to being the simplest solution, it finds additional support from the fact that there is a large amount of contact between Helong and Meto which must be attributed to the Proto-Meto stage.

While a full examination of the contact history between Helong and Meto is beyond the scope of this history, a sample of data which must be attributed to the Proto-Meto stage include loan words with /l/ in Helong but /n/ in Meto. Three examples are Funai Helong *slaen*, Meto *snaen*, both ‘sand’, Helong *nale-n*, Meto *nane-f*, both ‘daughter-in-law, daughter of opposite sex sibling’ and Helong *blapas* ‘ribcage, side’, Meto *bnapa-f* ‘side (of body)’. Such loans occurred between Meto and Helong (the direction of borrowing is not always clear) before Proto-Meto underwent the change of *l > *n*

A similar level of contact is not found between Helong and other languages of this region. Given this, I propose that Meto is a more recent arrival in Timor from Dengka. When Proto-Meto started being spoken in Timor, Helong was already present and there was contact between Helong and Proto-Meto.

References

Berg, René van den. 1991. Muna historical phonology. In J. N. Sneddon (ed.). *Studies in Sulawesi Linguistics, part 2* (NUSA Linguistic Studies of Indonesian and Other Languages in Indonesia, 33). Jakarta: Universitas Katolik Indonesia Atma Jaya.

Blust, Robert. 2009. *The Austronesian Languages.* Canberra: Pacific Linguistics.

Blust, Robert and Stephen Trussel. Ongoing. *Austronesian comparative dictionary.* (Online open access site at: www.trussel2.com/ACD.) [Accessed October, 2016.]

Edwards, Owen. 2017. Epenthetic and Contrastive Glottal Stops in Amarasi. *Oceanic Linguistics.* 56: 415–434

Edwards, Owen. 2016a. Amarasi. *Journal of the International Phonetic Association*. 46:113–125.

Edwards, Owen. 2016b. Metathesis and Unmetathesis: Parallelism and Complementarity in Amarasi, Timor. Ph.D. Thesis. The Australian National University. http://hdl.handle.net/1885/114481

van Engelenhoven, Aone. 2004. *Leti, a language of Southwest Maluku.* Leiden: KITLV Press.

van Engelenhoven, Aone. 2009. The position of Makuva among the Austronesian languages in East Timor and Southwest Maluku. In K. Alexander Adelaar & Andrew Pawley (eds.). *Austronesian historical linguistics and culture history: a festschrift for Robert Blust,* 425–442. Canberra: Pacific Linguistics.

Fox, James J. 2016. *Master poets, ritual masters: the art of oral composition among the Rote of eastern Indonesia.* Canberra: ANU Press.

Grimes, Charles E., Bernadus Lado, Thomas Ly, and Simon Tari. 2008. *Lii Hawu (Sabu) online Dictionary*. Kupang: Artha Wacana Press. http://e-kamus2.org/Hawu%20Lexicon/lexicon/main.htm

Grimes, Charles E., Carlos Marçal, Paolino Viana Fereira. 2014. *Introductory Dictionary of Mambae (Same): Mambae—English, English—Mambae, Mambae—Indonesia—Tetun Dili, Indonesia—Mambae, Tetun Dili—Mambae*. Darwin: Australian Society for Indigenous Languages.

Himmelamnn, Nikolaus P., John Bowden, Maurício C.A. Belo, John Hajek, Alex Tilman and Alex Freitas. 2006. fi:Waima'a_Lexical_database, in: Belo, Maurício C.A, John Bowden, John Hajek, Nikolaus P. Himmelman and Alexandre V. Tilman, *DoBeS Waima'a Documentation*, DoBeS Archive MPI Nijmegen, http://www.mpi.nl/DOBES/

Hull, Geoffrey. 1998. The Basic Lexical Affinities of Timor's Austronesian Languages: A Preliminary Investigation. *Studies in Languages and Cultures of East Timor*. 1:97–202.

Jonker, J. C. G. 1906. Over de eind-medeklinkers in het Rottineesch en Timoreesch. *Bijdragen tot de Taal-, Land- en Volkenkunde van Nederlandsch-Indië*. 59:263–343.

Jonker, J. C. G. 1908. *Rottineesch–Hollandsch Woordenboek.* Leiden: E. J. Brill.

de Josselin de Jong, J. P. B. 1947. *The Community of Erai (Wetar).* Amsterdam: Verhandelingen der Koninklijke Nederlandsche Akademie van Wetenschappen, Afdeeling Letterkunde.

van Klinken, Catharina. 1999. A grammar of the Fehan dialect of Tetun. Canberra: Pacific Linguistics.

Penn, David Trelly. 2006. Introducing Dadu'a: Uma língua de Timor-Leste. Honours Thesis. University of New England.

Mahdi, Waruno. 1994. Some Austronesian Maverick Protoforms with Culture-Historical Implications: II. *Oceanic Linguistics*. 33:431–490.

Mead, David. 1998. Proto–Bungku-Tolaki: Reconstruction of its Phonology and Aspects of its Morphosyntax. Ph.D. dissertation. Rice University.

Middelkoop, Pieter. 1972. *Nederlands-Timorees Woordenboek*. MS

Mills, Roger F. 1975. Proto-South Sulawesi and Proto-Austronesian phonology. Ph.D. dissertation. University of Michigan, Ann Arbor.

Mills, Roger F. 1991. Tanimbar-Kei: An Eastern Indonesian Subgroup. In Robert Blust (ed.). *Currents in Pacific linguistics: papers on Austronesian languages and ethnolinguistics in honour of George W. Grace*, 241–263. Canberra: Pacific Linguistics.

Morris, Cliff. 1984. *Tetun–English Dictionary.* Canberra: Pacific Linguistics.

Taber, Mark. 1993. Toward a Better Understanding of the Indigenous Languages of Southwestern Maluku. *Oceanic Linguistics* 32:389–441.

Trudgill, Peter. 1974. Linguistic change and diffusion: Description and explanation in sociolinguistic dialect geography. *Language in Society*. 3:215–246.

Wolff, John U. 1974. Proto-Austronesian *r and *d. *Oceanic Linguistics* 13:77–121.

Wolff, John U. 2010. *Proto-Austronesian phonology with glossary.* Ithaca, NY: Cornell Asia Program Publications.

Zorc, R. David. 1995. A glossary of Austronesian reconstructions. In: Tryon, Darrell T. (ed.), *Comparative Austronesian dictionary: An Introduction to Austronesian Studies*. Part 1: Fascicle 2: 1106-1197. New York: de Gruyter.

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